



Turning the Economic Tables in the Medieval Mediterranean: The Latin Crusader Empire and the Transformation of the Byzantine Economy, ca. 1100-1400

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“Turning the Economic Tables in the Medieval Mediterranean: The Latin
Crusader Empire and the Transformation of the Byzantine Economy, ca.
1100-1400”

A dissertation presented

by

Ece Gülsüm Turnator

to

The Department of History

in partial fulfillment of the requirements

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Turning the Economic Tables in the Medieval Mediterranean: The Latin Crusader
Empire and the Transformation of the Byzantine Economy, ca. 1100-1400

Abstract

This dissertation investigates the growth and decline of a major Mediterranean commercial economy at the crossroads of Christian Europe and the Muslim Middle East from 1100 to 1400. New and old evidence uncovers the transformation of the commercial economy of the Byzantine Empire in its relations with the Middle East, western Europe, and Crusader principalities established in Byzantium's ruins. Ultimately, this work helps identify and understand the economic roots for enduring divisions between East and West, and it is unique in observing from Byzantium's perspective the transformation of the Middle East—the economic dynamo of the ancient and medieval Mediterranean.

The dissertation innovates methodologically by combining different, independent types of material and textual evidence: coin finds in the Middle East and Italy, new archaeological data about ceramic fine ware production and distribution; Greek and Latin written evidence regarding textile production and consumption; local, regional and inter-regional commercial relationships in the Aegean basin, as well as the medieval textiles themselves and records of them.

Based on the combination of these different types of data this work argues that the regional differences in terms of the monetization and industrialization of western Asia Minor and Greece date from *before* the Fourth Crusade (1204). The monetary and economic systems in these regions alter significantly only after the middle of the thirteenth century. Within the internal economic development of the Byzantine lands, in other words, the Frankish conquest marked less of a rupture than hitherto believed on the basis of its impact on external economic relations. This study also broadens our understanding of the eastern Mediterranean trading world that emerged in the Byzantine successor state of Nicaea and illuminates the control Nicaean rulers exerted over monetary circulation and international trade to protect their local industries. This work uncovers heretofore unexplored aspects of the commercial prowess and economic policies of the Nicaean State.

Table of Contents

Abstract	iii
Acknowledgements	ix
Abbreviations	xi
General Introduction	1
Part 1 Money and its Circulation in Italy, Greece and Western Asia Minor	
Introduction. Circulation Patterns of Byzantine Coins in Italy and Asia Minor: an Overview	35
Eleventh and Post-Eleventh Century Variations in Coin Circulation between Italy and Eastern Asia Minor	39
The Numismatic Context from the End of the Eleventh through the Thirteenth Centuries	42
Chapter 1 Distribution Patterns of Byzantine Coins in Italy (From the Eleventh through the Fourteenth Century)	55
Chapter 2 Hoards from Greece and Western Asia Minor: Regional Differences in the Twelfth and Thirteenth Centuries	81
Chapter 3 Excavations from Greece and Asia Minor	
Analysis of the Numismatic Evidence from Excavations in Greece	118
Excavations from Western Asia Minor: Pergamon, Sardis, and Minor Sites	136
Conclusions to Part 1	150
Part 2 Ceramics and Exchange in the Post-Conquest Byzantine World	
Introduction	154
Chapter 4 Production and Distribution of Byzantine Ceramics in Asia Minor and Greece: New Evidence for their Development and Spread	158
Constantinopolitan White Wares and the Provincial Sgraffitos at a Glance	158
Chapter 5 Production and Distribution: Byzantine Ceramics in Asia Minor between the Late Eleventh and Mid-Thirteenth Centuries	189

Chapter 6 The Production and Distribution of Byzantine and Italian Fine Ceramics and Their Distribution in Greece and the Islands between the Late Eleventh and Mid-Thirteenth Centuries	248
Chapter 7 Italian and Zeuxippus Wares on Corinthian Tables: a Case Study on the Influx of Italian Maiolicas and the Export of Zeuxippus Wares	306
Maiolica Production in northern Italy	323
Maiolica Production in southern Italy	325
Corinthian Ceramic Production and its Evolution	327
Conclusions to Part 2	334
Part 3	
Textile Production in Byzantium and Changing Trends in Byzantium's Luxury Textile Exports and Imports ca.1100-1400	342
What We Know, and Why Study Luxury Textiles: Our Focus and Limitations	343
Chapter 8 Byzantine Textile Exports	351
Textile Terms, General Observations on Terminology and Borrowings	351
Centers of High-end Textile Production in Byzantium ca. 1050-1150	353
Contemporary Views on Byzantine Silk Textiles	365
Chapter 9 Changing Trends in Luxury Textile Exports from Byzantium ca. 1100-1300	376
What do the Silks Themselves Say? The Origins and Dates of Silks Preserved in Western Museums vs. the Inventories	378
Into the Future: The Scientific Archaeology of Dating and Attributing Provenance	389
Testing Modern Provenancing of Medieval Textiles with Medieval Documents	395
What Part of Romania was the "Romania" of the Inventories?	414
Chapter 10 Textile Production in the Successor States and the Changing Textile Import Trends into Byzantium ca. 1100-1400	428
Textile Imports into Byzantium ca. 1100-1400	437
The Western Textile Industry in the Thirteenth Century Context	447
The Changing Picture of Imported Textiles in Byzantine Sources ca. 1100-1400	455

Textile Production and Luxury Textile Imports: Nicaea and Epiros	486
Textile Production in the State of Nicaea	490
Conclusions to Part 3	506
Chapter 11 Why Study Trade in the State of Nicaea? On Local Production and International Trade in the State of Nicaea	511
General Conclusion	555
Bibliography	563
Appendix 1 Complementary Hoard Tables	628
Appendix 2 Chronological list of Church and Royal Inventories, Secular Wills Used in Part II	633
Appendix 3 A Gazetteer of Ceramic Finds	635

List or Tables:

Table 1. 1. Coins/Monies of Account and their Respective Values with respect to the Hyperpyron 1092–1204	44
Table 1. 2. Byzantine Coins and their Values with Respect to the <i>Hyperpyron</i> , 1204-1304	50
Table 1. 3. Byzantine Coin Finds from Italy, 12 th -14 th Century	56
Table 1. 4 Comparative Total Values of Hoarded Coins in Greece, Constantinople and Western Asia Minor	91
Table 1. 5. List of Thirteenth-Century Hoards from Greece and the Islands with Twelfth-Century Coins	97
Table 1. 6. List of Thirteenth-Century Hoards from western Asia Minor with Twelfth-Century Coins	99
Table 1. 7. List of Thirteenth-Century Hoards from Constantinople and its Environs with Twelfth-Century Coins	100
Table 1. 8. Exchange rates between Hyperpyron, Grosso, Sterling and Denier Tournois	
Table 1. 9. Coins and their Values in Athens	125
Table 1. 10. Total Number and Value of Twelfth- and Thirteenth-Century Issues in Corinth	128
Table 1. 11. Total Number of Coins in the First and the Second Half of the Thirteenth Century in Athens and Corinth	131
Table 1. 12. Total Number and Value of Twelfth- and Thirteenth-Century Issues from Nemea	133

Table 1. 13. Total Number/Value of Coins from Sardis and Pergamon	145
Table 3. 1. Textile Items from the Testament of Maria (1098)	457
Table 3. 2. Textile items from the Testament of Sabbas (1119)	462
Table 3. 3. Textile Items from the Inventory of the Monastery of Xylourgou (ca. 1142)	465
Table 3. 4. Textile Items from the Inheritance of Ioannikios Achouraites of Berroia (ca. 1225)	470
Table 3. 5. Textile Items from the Testament of Maximos Planetos (1255)	475
Table 3. 6. Textile Items from the Testament of Maximos of Boreine, Philadelphia (1247)	476
Table 3. 7. Textile Items from the Testament of Theodore Karavas	479
Table 3. 8. Textile Items from the Testament of Theodore Sarantenos	481

List of Figures:

Fig. 2. 1. Zeuxippus Plate	173
Fig. 2. 2. Slip-Painted Ware	174
Fig. 2. 3. Champlevé Plate	176
Fig. 2. 4. Fine-Incised Sgraffito Ware	178
Fig. 2. 5. Horizontal Chronology of Boiotian samples with Key	179
Fig. 2. 6. Green- and Brown-Painted Bowl	180
Fig. 2. 7. Proto-maiolica Plate	264
Fig. 2. 8. Zeuxippus Ware Fragments from Anaia Excavations	338

List of Maps:

Map 1. 1. Thirteenth-Century Hoards from Greece and western Asia Minor	96
Map 2. 1. Sites Discussed in Relation to Fine Wares	182

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ABBREVIATIONS

Primary Sources and Reference Works

- Annales Ianuenses* Imperiale, C., ed., *Annali genovesi di Caffaro e de'suoi continuatori*.
Fonti per la storia d'Italia pubblicate dall'Istituto Storico Italiano (Rome, 1923).
- Attaleiates, *Diataxis* Gautier, P., *La diataxis de Michel Attaliate* (Paris, 1981).
- Bees Bees, N., "Unedierte Schriftstücke aus der Kanzlei des Johannes Apokaukos des Metropolitens von Naupaktos (in Aetolien)," *Byzantinische-Neugriechische Jahrbücher* 21 (Athens, 1976), 55-160.
- BHG *Bibliotheca hagiographica graeca*, 3rd ed., ed. F. Halkin, *Subsidia Hagiographica* 47 (Brussels, 1957; repr. 1969).
- Bertolotto, G., ed., "Nuova serie di documenti sulle relazioni di Genova con l'Impero Bizantino," *Atti della Società Ligure di Storia Patria* 28 (1897), 343-370.
- Blaise, *Lexicon* Blaise, A., *Lexicon Latinitatis Medii Aevi: praesertim ad res ecclesiasticas investigandas pertinens. Dictionnaire latin-français des auteurs du Moyen-Age* (Turnholt, 1975). (The on-line version is available under Brepols, "Database of Latin Dictionaries," <http://clt.brepolis.net.ezp-prod1.hul.harvard.edu/dld/Default.aspx>).
- Carile, "Partitio," A. Carile, "Partitio Terrarum Imperii Romaniae," *Studi Veneziani* 7 (1965), 125-305.
- Chomatianos, *Ponemata*. Prinzing, G., ed., *Demetrii Chomateni. Ponemata Diaphora* (Berlin, 2002).
- (N.) Choniates, *Historia* van Dieten, J., ed., *Nicetae Choniatae historia* (Berlin, 1975).
- EI *Encyclopaedia of Islam, Second Edition*. Brill Online, (<http://referenceworks.brillonline.com.ezp-prod1.hul.harvard.edu/browse/encyclopaedia-of-islam-2>). Accessed 7. 6. 2012

- Encyclopedia Britannica* On-line Encyclopedia Britannica (<http://www.britannica.com.ezp-prod1.hul.harvard.edu/?cameFromBol=true>). Accessed 9. 10. 2012
- Eparchenbuch* Koder, J., ed., *Das Eparchenbuch Leons des Weisen* (Vienna, 1991).
- Goitein Goitein, S. D., *A Mediterranean Society: the Jewish Communities of the Arab World as Portrayed in the Documents of the Cairo Geniza*, 6 vols. (Berkeley, 1967-1993).
- Gregoras Bekker I. and Schopen L., *Nicephori Gregorae historiae Byzantinae*, 3 vols. (Bonn, 1829-1855).
- LR Agapitos, P., *Διηγήσεις Λιβιστρός και Ρόδαμνης. Κριτική έκδοση της διασκευής α* (Athens, 2006).
- LSJ Liddell, H. G. and Scott, R., *A Greek-English Lexicon* (Oxford, 1996).
- MM Miklosich F., and Müller, J., *Acta et diplomata graeca medii aevi–sacra et profana*, 6 vols., (Vienna, 1860–90).
- Molinier Molinier, É., *Inventaire du trésor du Saint Siège sous Boniface VIII* (Paris, 1888).
- Münz and Frothingham, Münz, E., Frothingham, A.L., *Il Tesoro della Basilica di S. Pietro in Vaticano dal XIII al XV secolo con una scelta d’inventarii inediti* (Rome, 1883).
- Petrides. Petrides, S., “Jean Apokaukos. Lettres et autres documents inédits,” *IRAIK* 14 (1909), 69-100.
- PG J.-P. Migne, ed., *Patrologiae Graecae*, 161 vols. (Paris, 1851-1866).
[<http://nrs.harvard.edu/urn-3:hul.eresource:patrgrae> (accessed 3.5.2010)]
- PLP *Prosopographisches Lexikon der Palaiologenzeit*, ed. E. Trapp et al., 12 vols. (Vienna, 1976-1996).
- Psellos, *Chronographia* Renauld, É., Michel Psellos. *Chronographie ou histoire d’un siècle de Byzance (976-1077)*, 2 vols. (Paris, 1926-1928. Repr. 1967).
- Pseudo- Kodinos* Verpaux, J., *Pseudo-Kodinos. Traité des offices* (Paris, 1976).

- Schilbach, *Metrologie*. Schilbach, E., *Byzantinische Metrologie* (Munich, 1970).
- Skoutariotes Heisenberg, A., *Georgii Acropolitae opera*, vol. 1. (Leipzig, 1903), 277-302.
- Timarion* Romano, R., *Pseudo-Luciano, Timarione* (Naples, 1974).
- TLG *Thesaurus Linguae Graecae* (<http://stephanus.tlg.uci.edu/indiv/weblogin>)
- TTh G. L. F. Tafel, G. M. Thomas, *Urkunden zur älteren Handels- und Staatsgeschichte der Republik Venedig*, 3 vols. (Vienna 1856–57).
- Trapp, E., *Lexikon zur byzantinischen Gräzität: besonders des 9.-12. Jahrhunderts*, 7 vols. (Vienna, 1994-2011)

Secondary Sources

- AAA *Αρχαιολογικά Ανάλεκτα εξ Αθηνών*
- AD *Αρχαιολογικὸν Δελτίον*
- ANES *Ancient Near Eastern Studies Journal*
- Arslan, *Repertorio dei ritrovamenti di moneta altomedievale in Italia (489-1002)* (Spoleto, 2005).
<http://www.ermannoarслан.eu/Repertorio/RepertorioAMAggiornamento>
 (Accessed 7/24/2012)
- AST *Araştırma Sonuçları Toplantısı*
- BCH *Bulletin de correspondance hellénique*
- BF *Byzantinische Forschungen*
- BMOGS *Byzantine and Modern Greek Studies*
- BSA *The Annual of the British School at Athens*
- BSR *Papers of the British School at Rome*

<i>Catalogue</i>	<i>Catalogue of the Byzantine Coins in the Dumbarton Oaks Collection and in the Whittemore Collection</i> (Washington, DC, 1966–99). Author name and specific volume number of the series are given in the footnotes.
<i>CIETA</i>	<i>Bulletin de centre international d' etude des textiles anciens</i>
<i>EHB</i>	A. Laiou, ed., <i>The Economic History of Byzantium: from the Seventh through the Fifteenth Century</i> , 3 vols. (Washington D.C., 2002).
<i>DOP</i>	<i>Dumbarton Oaks Papers</i>
<i>Grierson, Byzantine Coins.</i>	Grierson, P., <i>Byzantine Coins</i> (Berkeley, 1982).
<i>Hendy, Coinage and Money</i>	Hendy, M. <i>Coinage and Money in the Byzantine Empire 1081-1261</i> (Washington D.C., 1969).
<i>IstMitt</i>	<i>Istanbuler Mitteilungen</i> , Deutsches Archäologisches Institut, Abteilung Istanbul
<i>IJNA</i>	<i>International Journal of Nautical Archaeology</i>
<i>INA</i>	<i>Institute of Nautical Archaeology Annual</i>
<i>INA Quarterly</i>	<i>Institute of Nautical Archaeology Quarterly</i>
<i>IRAIK</i>	<i>Izvestiia Russkogo arkeologicheskogo instituta v Konstantinopole</i>
<i>JESHO</i>	<i>Journal of the Economic and Social History of the Orient</i>
<i>JTS</i>	<i>Journal of Turkish Studies</i>
<i>KST</i>	<i>Kazı Sonuçları Toplantısı</i>
<i>MEC III</i>	Grierson P. and Travaini, L., <i>Medieval European Coinage. Italy III</i> (Cambridge, 1998).
<i>JÖB</i>	<i>Jahrbuch der Österreichischen Byzantinistik</i> [note: before 1969, JÖBG]
<i>NC</i>	<i>The Numismatic Chronicle</i> [and <i>Journal of the Royal Numismatic Society</i>]
<i>NCirc</i>	<i>The Numismatic Circular</i>
<i>OLBA</i>	<i>Kilikia Arkeolojisini Araştırma Merkezi Süreli Yayını</i>

- ODB* *The Oxford Dictionary of Byzantium*. Ed. A P. Kazhdan (e-reference edition)
(Oxford, 1991, 2005) Last accessed 1 September 2012 <http://www.oxford-byzantium.com/>
- RIN* *Rivista italiana di numismatica e scienze affini*
- VizVrem* *Vizantiiskii Vremennik*

General Introduction

The Fourth Crusade and the political divides created in its aftermath in the Aegean region have traditionally served to explain many regional differences in the Aegean that, at first glance, appear to postdate 1204. Conventionally, the Fourth Crusade is also deemed the culmination of the steady decline in the twelfth century of Byzantine political unity and economic prowess. This dissertation challenges this interpretation of the twelfth-century Byzantine economy as well as its thirteenth-century aftermath. The new assessment relies on new evidence and new study of old evidence, primarily, the money that circulated, and two important Byzantine industries: fine ceramic and the fine textiles.

Interpreting the strengths and weaknesses of the twelfth-century Byzantine economy is inextricably tied to interpretations of Byzantium's economic growth, perceptions of its "golden age" and decline. According to most scholars, from both agrarian and commercial perspectives, the apogee of the Byzantine economy (and the centralized state) is the Macedonian period between the ninth and the eleventh centuries.¹ The Komnenian period that followed on its heels was, at best, a period of growth that carried within it the seeds of decline.² The main culprit of the decline is deemed the rapid "feudalization" of the Byzantine state and its economy, although, as

¹ P. Lemerle, *The Agrarian History of Byzantium. From the Origins to the Twelfth Century* (Galway, 1979), 68-73.

² G. Ostrogorsky, *Pour l'histoire de la féodalité byzantine*, trans. H. Grégoire (Brussels, 1954).

Lemerle observed, examples of great private properties before the Komnenoi are “innumerable,” and, as an agrarian system, Byzantine feudalism has characteristics that make it unique and quite unlike that of a Western-style feudalism.³ In terms of the agrarian economy, one of the phenomena viewed as a prominent sign of this development, is a change in the state’s fiscal practices, which is reflected in the shift from the cadaster to the *praktikon*.⁴ The fiscal cadaster, inherited from Rome, recorded the taxable properties of every household in a settlement, was supplanted by the *praktikon*, which recorded the taxable properties of the landlords and those of their dependent peasants. The implication here is that, for all-important fiscal matters, the state ceased dealing directly with all its citizens/subjects, and shifted to a stance in which it dealt with its non-privileged subjects through privileged subjects-intermediaries who exercised over the former some measure of state-recognized social and economic control. In short, the twelfth century has been broadly interpreted as a period of political decentralization and steady economic decline thought to attend the

³ Lemerle, *Agrarian History*, 202 (for the quotation) and 242-248. See a more recent evaluation of the scholarship on Ostrogorsky and Lemerle’s views on Byzantine feudalism: A. Harvey, “Economy,” in J. Harris, ed., *Palgrave Advances in Byzantine History*, (New York, 2005), 90-91.

⁴ The shift is best explained in Oikonomides, *Fiscalité et exemption à Byzance (9-11. siècles)* (Athens, 1996), 63 although, he does not necessarily see this shift as decline.

decline of a powerfully centralized state.⁵ The Fourth Crusade and the defeat of the mighty Byzantine Empire looked like an inevitable and natural outcome of this trend.

In terms of the commercial economy, the Komnenian period has not always been viewed positively either, as it period began with the granting of commercial privileges to the Italians, a process that once begun, never stopped expanding, even though the first trade agreement with the Italians—with Venice—itsself occurred much earlier, at the very end of the tenth century (992). According to Michael Hendy, the privileges were more like capitulations, and because of them the Byzantines lost control over their economy (especially the commercial economy).⁶ The final blow came in 1204 when the Byzantines completely lost control to the Crusaders not only of their economy but also of their time-honored capital, in addition to a vast array of lands mostly in Greece.

Angeliki Laiou offered a different interpretation of the twelfth-century commercial economy in Byzantium. According to Laiou, the privileges are a sure sign of the expansion of free trade and growth of the presence of Byzantine goods and merchants in international trade.⁷ The Komnenian success itself, in turn, as Laiou

⁵ Increased aristocratization of Byzantine governance is interpreted as the main reason behind the decline during and after the thirteenth century. A. Ducellier, M. Kaplan, *Byzance IV^e-XV^e siècle* (Paris, 1996), 111.

⁶ Hendy, *Catalogue* vol. 4.1, 10.

⁷ A. Laiou, "Exchange and Trade. Seventh-Twelfth Centuries," in *EHB*, 749-750; Laiou, "Monopoly and Privileged Free Trade in the Eastern Mediterranean (8th-14th Centuries)," in D. Coulon, C. Otten-Froux, P. Pagès and D. Valérian, eds., *Chemins d'Outre-Mer. Études d'histoire sur la Méditerranée médiévale offertes à Michel Balard* (Paris, 2004), 512-526.

argued, rested solidly on the expansion of all constituent parts of the economy (demography, agrarian and commercial production) during the eleventh century, which had been first detected by Paul Lemerle, were subsequently studied in detail in the important book by Alan Harvey.⁸ In terms of production and commercialization of goods, expansion was perceived as an eleventh-century phenomenon which reached its culmination in the following century. This was a new take on the twelfth-century economy, one that saw it as dynamic, internationally connected and productive.

Which one of these apparently contradictory interpretations comes closest to the truth? In pursuit of this question, this dissertation focuses on the commercialized, industrialized sectors of the economy from the second half of the eleventh century onward. Trends in these sectors can be traced unambiguously from the evidence provided by the study of coins, fine ceramic wares and fine textiles. The choice to focus on coins and fine ceramics stems from the availability of archaeological studies that allow us to analyze the accumulated evidence that come from individual sites. While the choice to study the textiles rests on wanting to focus on another industrialized sector of the economy which textual evidence that the *Thesaurus Linguae Graecae* (TLG), a digital library that includes sources written in Greek from the eighth century B.C. to the sixteenth century, allows us to do. Studies on Byzantine glass and metalwork production are still in

⁸ P. Lemerle, *Cinq études sur le XIe siècle byzantin* (Paris, 1977), A. Harvey, *Economic Expansion in the Byzantine Empire 900-1200* (Cambridge, 1989).

fledgling stages, even though significant improvements have been made in those fields and are forthcoming.⁹

The first part of the dissertation assesses how extensively the Byzantine economy in the core areas of the empire was monetized at the end of the eleventh century. The first chapter of Part 1 analyzes the denominations and the circulation patterns in different parts of the empire and it assesses what the surviving Byzantine coins in Italy and eastern Turkey suggest about the commercial contacts that the Byzantines seem to have had with their immediate neighbors. The second chapter of Part 1 is an analysis of the hoard evidence and the third an analysis of single finds that together aim to understand the overall trends in the monetization of western Asia Minor and Greece.

The development of production of high end ceramics, and textiles, the two industries evaluated in this dissertation, are discussed in Parts 2 and 3 respectively. Both parts seek to understand the production, exportation and importation based not only on Byzantine sources but also on evidence that comes from Byzantium's eastern and western neighbors. In this way, the dissertation analyzes the role that Byzantine fine ceramic and textile producers played in supplying both domestic and international demand. It emerges that in the twelfth century both the fine ceramics and the fine

⁹ For the most recent works of analysis of glass and metalware production in Byzantium see A. Laiou and C. Morrisson, *The Byzantine Economy* (Cambridge, 2007); M. M. Mungo, ed., *Byzantine Trade, 4th- 12th Centuries* (Surrey, 2009); For an analysis of networks and regional economies in Byzantium see, C. Morrisson, ed., *Trade and Markets in Byzantium* (Washington D. C., 2012).

textiles of Byzantium were sought after by foreigners. This trend appears to have continued until roughly the middle of the thirteenth century. Finally, in Chapter 11 we cast a closer look at the political dimensions of economic development in the State of Nicaea. The political measures of the Nicaean emperors, and in particular of John III Vatatzes (r. 1221-1254),¹⁰ exerted a significant amount of control over the economy. This thesis provides a deeper understanding of the repercussions of the protectionism that the Nicaeans deployed to promote and to protect their local industries. We can see this in the way the Nicaeans regulated the monetary aspects of their economy and in the way they seem to have attempted to control and protect their fine ceramic and textile industries.

Another novel perspective in recent scholarship has come from interpreting Byzantium's economic growth not only in temporal but also but also in geographical terms and assessing different paces in growth in different regions. Variations in terms of the concentration of economic activity between Greece and Asia Minor have been sensed by scholars. Alexander Kazhdan noted the rise of economic activity in the provinces in the eleventh and the twelfth centuries. He explicitly wrote in 1985 that by the end of the eleventh century, "Constantinople no longer held a monopoly in the

¹⁰ In this dissertation all of the dates in brackets after a ruler's name give their regnal years, unless otherwise stated.

production of goods.”¹¹ Hendy studied the Balkans and Anatolia separately in his colossal history of the Byzantine monetary economy, as did Michel Kaplan, in his analysis of the agrarian economy.¹² However, both Hendy and Kaplan perceived that the Balkans and Anatolia were more or less equally well developed in terms of commercial and agrarian sectors of the economy, and that they constituted the “heart” of the Byzantine economy from both agrarian and commercial perspectives. This view has recently been refined in the assessment of the Byzantine economy in the twelfth century by Harvey. Harvey, has come closest to the focus of this dissertation when he wrote explicitly that “the revival of the urban economy in this period was most pronounced in the European provinces,” *vis à vis* Asia Minor.¹³ Laiou and Morrisson have also recently written about a regional variation that arose in the fragmented political scene caused by the events of 1204; yet, like Hendy and Kaplan, they believed that before the thirteenth century Greece and western Asia Minor were both well developed, although Greece constituted the heart of Byzantine industries—what they collectively term “secondary production.”¹⁴ Recently, in 2008, Michael Angold wrote that even though there were signs of economic growth in the eleventh century, this

¹¹ A. P. Kazhdan, A. W. Epstein, *Change in Byzantine Culture in the Eleventh and Twelfth Centuries* (Berkeley, 1985), 41.

¹² M. Hendy, *Studies in the Byzantine Monetary Economy c. 300-1450* (Cambridge, 1985), 85-89, 137; M. Kaplan, *Les hommes et la terre à Byzance du VI^e au XI^e siècle* (Paris, 1992), 447-450.

¹³ Harvey, “Economy,” ed. J. Harris, 93-94.

¹⁴ Laiou and Morrisson, *The Byzantine Economy*, 130, 166-170.

growth related mostly to the “Greek lands” where towns were prospering and becoming centers of trade and manufacture.¹⁵ This dissertation advances the discussion further by analyzing and assessing the extent of the growth of Byzantine ceramic and textile industries and their regional and temporal rhythms in western Asia Minor and mainland Greece.

In short, via an analysis of the evidence on numismatics, fine ceramics and fine textiles, this dissertation investigates three main questions regarding the economy of the Byzantine Empire. The first point of investigation uncovers the production, commercialization, import and export trends of fine textiles and ceramics in Byzantium during the twelfth and the thirteenth centuries. The second investigates the emergence of provincial centers which, in addition to Constantinople, served as loci of production for the industrialized sectors of the economy. Sometime during the eleventh century, arguably during its second half, and through the twelfth century, new centers of production arose and began to prosper. They did so more intensively in what is today modern Greece. During the second half of the eleventh century and through the twelfth century, fine ceramic- and textile-producing sectors concentrated in certain regions, in certain specific regions and cities in Greece. This study investigates how and when this scene altered. Both of these points are strongly related to the third point of investigation

¹⁵ M. Angold, “Belle époque or Crisis? (1025-1118),” in J. Shepard, ed., *The Cambridge History of the Byzantine Empire c. 500-1492* (Cambridge, 2008), 591.

which is the analysis of the fate of these very same sectors after the Fourth Crusade. This dissertation proposes that the region-specific, localized monetization of the Byzantine economy was not a creation of the Fourth Crusade but was entrenched already before the arrival of the Crusaders, during the twelfth century. This helps us understand this second key observation: that the decline of the Byzantine economy did not automatically accompany the fall of the capital. For at least half a century, the surviving Greek states continued to produce and export their fine ceramics and fine textiles, even if in diminishing quantities. The decisive turn in this long trajectory that dates back to the eleventh century at the very least seems to have taken place only after the middle of the thirteenth century. The immediate reasons behind Byzantium's economic decline after the middle of the thirteenth century, on the other hand, need to be sought in both the internal developments of the Western world and the rise of the Mongol Empire.

If we assess the level of productivity and economic advancement of pre-industrial economies by their output of fine pottery, metal work, glass and textiles Byzantium was, in terms of the goods produced as well as the technologies developed, not only physically but also in terms of economic development closer to the Eastern world. According to some recent estimates based on economic development, the West

did not fully take over the Eastern civilizations—China in particular—until about 1500 judging from the rates of wages and grain prices, as well as population figures.¹⁶

The parts of the world essentially south and east of Byzantium and well into China were well-connected by the ninth century at the latest. Archaeological evidence points to the participation of Siraf, a ceramic production site near the Gulf of Hormoz on the Persian Gulf, trading with China in the latter half of the eighth century, which brought in a fair amount of Chinese porcelain as well as Islamic glazed ceramics to Siraf. In addition to the fine ceramics, further evidence of international trade that connected the Persian Gulf to Byzantium, India and China were found at this particular site: ivory objects point to Indian imports; a Chinese bronze mirror alongside a coin of Tang Dynasty from 621 A.D. together with a gold *solidus* of Emperor Constans I (651-659), are all evidence of the beginnings of this trade.¹⁷ Among a hoard of other travel accounts describing voyages from Canton to the Muslim world, the Persian sea captain Buzurg ibn Shahriyah (900-953) described the figure of Al- Ruhbab who traveled to China seven times, a sure sign of the intensified trade relations between the east and

¹⁶ K. G. Persson, *An Economic History of Europe. Knowledge, Institutions and Growth, 600 to the Present* (Cambridge, 2010), 70; K. N. Chaudhuri, *Asia before Europe. Economy and Civilization of the Indian Ocean from the Rise of Islam to 1750* (Cambridge, 1990), 379-382. Byzantium's estimated population, at its peak in the eleventh century, may have been about 19 million, if Laiou and Morrison are correct. See, Laiou and Morrison, *The Byzantine Economy*, 93. For an excellent overview of population studies and estimates for the Byzantine Empire see, D. Stathakopoulos, "Population, Demography, and Disease," in E. Jeffreys, J. Haldon and R. Cormack, eds., *The Oxford Handbook of Byzantine Studies* (Oxford, 2008), 309-316.

¹⁷ M. Tampoe, *Maritime Trade between China and the West. An Archaeological study of the Ceramics from Siraf (Persian Gulf), 8th to 15th Centuries A.D.* (Oxford, 1989), 119-120.

west of the Indian Ocean by the ninth century.¹⁸ More recent archaeological discoveries such as the ninth-century (838 A.D.) ship that sank in Indonesian waters on its return voyage from China show the intensity of this trade between the eastern Mediterranean and China.¹⁹ In fact, the Arabic sources from the ninth and the tenth centuries show conclusively that Basra and the Persian Gulf were sending out trading ships to India, Indonesian Archipelago and China.²⁰ These ships were carrying goods manufactured using the best technology of the time alongside valuable plants and spices. Textiles, ceramics, metal goods, glassware, silk, cotton, jewelry, as well as, of course, spices, were the highlights of this trade. Chinese porcelain reached the court of the Abbasid Caliph Harun al-Rashid in 800; at around the same time production of cotton, originally from India, began expanding within the Muslim world.²¹

¹⁸ *Ibid*; D. Agius, *Classic Ships of Islam* (Leiden, 2008), 65, 77; On Chinese sources referring to the Byzantines see, C. Zhi-Qiang, "Narrative Materials about the Byzantines in Chinese Sources," J. Burke, U. Betka, P. Buckley, K. Hay, R. Scott, A. Stephenson, eds., *Byzantine Narrative* (Melbourne, 2006), 505-521.

¹⁹ This ship may be Arab or Indian as the title of the article suggests: M. Flecker, "A 9th-century Arab or Indian Shipwreck in Indonesian Waters," *IJNA* 29.2 (2000), 199-217. Regarding specifically the trade relations between the Arabs and the Far East, concerning the later Middle Ages, at Quanzhou, for example, archaeologists found seven mosques and about 150 tombs with Arab inscriptions. The Arab merchants were still there when Ibn Battuta traveled there in the fourteenth century. See, D. Auffray, "Commerçants et navigateurs arabes en Chine pendant le haut Moyen Âge," in eds. Y. Y. Al Hijji and V. Christides, *Aspects of Arab Seafaring. An Attempt to Fill in the Gaps of Maritime History* (Athens, 2002), 13-17.

²⁰ Chaudhuri, *Asia before Europe*, 61.

²¹ P. Wolff and F. Mauro, *Histoire générale du travail. L'Age de l'artisanat (Ve-XVIIIe siècles)* (Paris, 1960), 22, 59; R. Bulliet, *Cotton, Climate, and Camels in Early Islamic Iran. A Moment in World History* (New York, 2009); Chaudhuri, *Asia before Europe*, 302.

Underlying economic expansion were technological developments that were heralded first in the Far East and the Muslim world. Primarily, some of the Middle Ages' largest cities were situated in the eastern Mediterranean, and of course, China.²² The population growth itself may be connected with the advances in agriculture and technology. For example, earliest water mills may go back to the fourth-century B.C. Egypt. The Romans used water mills extensively, and water mill technology was already quite extensive in Europe in general by the onset of the ninth century.²³ The Muslims and/or the Byzantines are credited with further expanding water mill technology in southern Europe and the Middle East.²⁴ The first known reference to windmills anywhere in the world comes from the Arab historian and traveler Masudi (d. 956).²⁵ Irrigation channels, terracing systems (such as the Balinese rice terracing system which is known to have existed by the early tenth century), dams, reservoirs, underground canals (known as the *qanat* system) and embankments were all known in

²² Chaudhuri, *Asia before Europe*, 379-382; A. Watson, *Agricultural Innovation in the Early Islamic World. The Diffusion of Crops and Farming Techniques* (Cambridge, 1983), 133-134.

²³ A. Wilson, "Water-Mills at Amida: Ammianus Marcellinus 18. 8. 11," *Classical Quarterly* 51.1 (2001), 231-236. *Idem.*, "Machines, Power and the Ancient Economy," *The Journal of Roman Studies* 92 (2002), 1-32. According to Dietrich Lohrmann, some of the earliest evidence on the expansion of mills, specifically in Neustria, come from sixth century sources such as Gregory of Tours: D. Lohrmann, "Le moulin à eau dans le cadre de l'économie rurale de la Neustrie (VIIe-IXe siècles), *La Neustrie* 16/1 (Sigmaringen, 1989), 367-404. Also see, M. McCormick, "Discovering the Early Medieval Economy," in J. R. Davis and M. McCormick, *The Long Morning of Europe. New Directions in Medieval Studies* (Aldershot, 2008), 14-15.

²⁴ Ö. Wikander, *Handbook of Ancient Water Technology* (Leiden, 2000), 395-410.

²⁵ M. Harverson, "Asia," in *Encyclopedia Iranica* On-line. Originally Published: December 15, 1987. Accessed in <http://www.iranicaonline.org/articles/asia-or-asiab-mill#pt2> (Accessed on 10.25.2012).

the Eastern world and were arguably applied more widely than in the West up until about the end of the eleventh century, despite the extensive uses of similar technology under the Romans.²⁶ Water raising technology was found throughout India and the Middle East; water-driven *norias* or animal-powered *saqiya*s evoked comments from many Islamic geographers and travelers such as the late twelfth-century author Yaqut al Hamawi.²⁷

Thanks to the technological advancements, population growth and accumulation of agricultural knowledge, a whole range of crops originally cultivated in a zone extending from Pakistan to China became first an integral part of the agricultural system in the Middle Eastern world. Among these crops and plants sorghum, cotton, rice, sugar cane, eggplant (aubergine, “badhinjan” in Arabic), spinach, coconut palm and watermelon, stand in the front rank. What is so remarkable about these crops and plants is that all of them are known to have been brought by the Arabs (perhaps mostly in Arab ships trading with the Far East) from India and the Far East and diffused throughout the Middle East particularly in the ninth and the tenth centuries.²⁸ The diffusion of water technology, water and wind mills, as well as irrigation, water

²⁶ Chaudhuri, *Asia before Europe*, 239; Watson, *Agricultural Innovation*, 108.

²⁷ Chaudhuri, *Asia before Europe*, 239.

²⁸ Watson, *Agricultural Innovation*, 12-124; Wolff and Mauro, *Histoire générale du travail*, 59; B. Laws, *Fifty Plants that Changed the Course of History* (Buffalo, 2010), 90, 155, 166, 211; Chaudhuri, *Asia before Europe*, 220-225. Chaudhuri writes that the three-field rotation of crops was known in sixth-century China. *Ibid.*, 224-225.

transport and preservation systems were thus advanced alongside the introduction and acclimatization of a host of cash crops, plants and fruits by the tenth century. This expanded agricultural knowledge was added to Europe's arsenal of technical advances via Muslim Spain during the tenth and the eleventh centuries.

The role the Arabs, primarily, and the Byzantines, perhaps secondarily, played in the expansion and transfer of technical know-how was equally significant regarding the development of industries such as glass-making, textile and fine ceramic ware-making. For example, important quantities of silk imports, possibly from China, reached the Roman lands in the first century. However, production of silk cloths in the Eastern Mediterranean does not predate the sixth or the seventh century. Archaeological research has yet to uncover in detail the development of the early silk industry in the Eastern Mediterranean, but there is little doubt that both Byzantium and the Muslim world were important sources of luxury silks especially after the ninth century. Tinnis in Egypt, to the east of Damietta, had thousands of looms operating by the middle of the twelfth century. It comes as little surprise that both Tinnis and the Byzantine silk cloth production sites in Greece were sacked by the Normans in the latter half of the twelfth century after capturing the silk-cloth-producing settlements in south Italy and Sicily from the Muslims in the course of the eleventh century.²⁹ The ninth and the tenth

²⁹ Y. Lev, "Tinnis: An Industrial Medieval Town," in *L'Egypte Fatimide. Son art et son histoire* (Paris, 1999), 83-96.

centuries likely constitute the apogee of the development and expansion in the trade of the ceramic and glass industries in both the Muslim world and in Byzantium.³⁰

The role the Muslims and the Byzantines played specifically in shipping technology is worth mentioning here: in warships the Middle Ages was marked by the replacement of the Greek trireme and the Roman bireme with the Byzantine *dromon*, which is first mentioned by Prokopios in the sixth century. Arabic ship names such as *tarida*, *qadis*, *ushari* adopted and used by both the Byzantines and the Latin West, indicate an original Muslim contribution to Mediterranean shipping. Not surprisingly, only the Fatimid navy was able to challenge the Byzantine navy and *vice versa* in the tenth and the early eleventh century. The Byzantine and Muslim dominance of the seas lasted for at least until the end of the eleventh century. To give an example, eleventh-century Muslim three masted-ships pre-dated their Western counterparts by about two centuries.³¹ In terms of the actual structure of sea-going vessels and their building technology, the Byzantines are credited as inventors of the skeleton-first system which demonstrably began evolving as early as the fourth century before eventually replacing

³⁰ Wolff and Mauro, *Histoire générale du travail*, 22, 61. V. François and J. M., Spieser, "Pottery and Glass in Byzantium," *EHB* 2, 593-609; B. Zorn and A. Hilgner, eds. *Glass along the Silk Road from 200 BC to AD 1000* (Mainz, 2010), especially parts 2 and 3, 71-175. Chaudhuri writes that the horizontal drawloom itself was invented by the Chinese. See, Chaudhuri, *Asia before Europe*, 316.

³¹ J. Pryor and S. Bellabarba, "Medieval Muslim Ships of the Pisan Bacini," *The Mariner's Mirror* 76 (1990), 99-118, especially, 102-105; Pryor, "From Dromon to Galea: Mediterranean Bireme Galleys AD 500-1300," in R. Gardiner, J. Morrison, eds., *The Age of the Galley. Mediterranean Oared Vessels since Pre-Classical Times* (London, 1995), 101-116; Agius, *Classic Ships of Islam*, 177, 182, 337-338. Agius suggests that the "Greek-fire" might have been a Chinese invention. *Ibid.*, 382-384.

the shell-first system: the first perfected example of its application is seen in the Serçe Limanı Wreck dated to the eleventh century.³² However, the date may be pushed back as more evidence is sifted through the study of thirty-three shipwrecks dated mostly to the ninth and the tenth centuries found at the Yenikapı (Theodosios) Harbor in Istanbul.³³ Lateen sails may have been used in India first but they were possibly either by the Arabs or the Byzantines and were thus later introduced to the Mediterranean by them.³⁴ Another development attributed to the Muslim world in terms of its contributions is the sternpost rudder, which spread to the Eastern Mediterranean after the eleventh century; the earliest-known depiction of the sternpost rudder is found in a manuscript, possibly of Egyptian origin, currently preserved in the Topkapı Museum Library in Istanbul.³⁵ All of these advancements in the structure of sea-going vessels need to be viewed together with the mainly Muslim contributions to sailing technologies such as their improvements on ancient instruments used in sailing like the

³² F. van Doorninck, "The Yassı Ada Byzantine Shipwrecks," in *Barbarian Seas: Late Rome to Islam*, S. Kingsley, ed., (London, 2004), 48-53; "Yassiada Fourth Century, Yassiada Seventh-Century Construction and Serçe Limanı," <http://nautarch.tamu.edu/class/316/serce/> (Accessed 1. 7. 2013).

³³ Pryor, "Ships," in *The Crusades an Encyclopedia* ed. Alan Murray (Santa Barbara, 2006), vol. 4, 1096-1103; G. Bass, et. al., ed., *Serçe Limanı: An Eleventh-Century Shipwreck*, 2 vols. (College Station, 2004); U. Kocabaş, ed., *The 'Old Ships' of the 'New Gate.' Yenikapı'nın Eski Gemileri* (Istanbul, 2008), especially 83-183.

³⁴ Block argues that the lateen sails were an Arab invention: L. Block, *To Harness the Wind. Short History of the Development of Sails* (Annapolis, 2003), 18-19. Pryor writes that lateen sails may have been used in Byzantine *dromons* as the earliest mention of them may be found in Prokopios: Pryor, "From Dromon to Galea," 101.

³⁵ A. Babuin, M. Palioura, "Far Removed from Reality? A Brief Iconographical Survey on Byzantine and Muslim Ships," in Ch. G. Makrypoulas, ed., *Sailing Ships of the Mediterranean Sea and the Arabian Gulf* (Athens, 1998), 81.

quadrant, the astrolabe, and the compass. Thus, both the Byzantines and the eastern world, of which they were a part, constituted the more advanced regions of the world by the end of the eleventh century in terms of industrial and technological developments.

To reiterate, as two distinct but comparably well-advanced constituents of the civilization in the south and eastern Mediterranean, the Byzantines and the Muslims were in a separate league far advanced over their Western counterparts in terms of population figures, urbanism, and agricultural and industrial technology. As a result of advanced technology, know-how and the theretofore unmatched extent of trade, they, especially the Muslims, but also the Byzantines, constituted the sources that the Europeans turned to for manufactured products, particularly luxury textiles, ceramics, glass or even metal wares. This dissertation focuses on the last two centuries when Byzantium still played that role *vis-à-vis* the West. It probes deeply and specifically into the internal developments of Byzantium's ceramic and textile industries and where these industries stood with respect to the rest of the world that surrounded Byzantium.

Between ca. 650 and ca. 1300, until westerners made their first business trips to the Far East, eastern merchants and captains dominated trade within the bounds of this region where Persian, Indian, East Asian as well as Egyptian products and goods were

traded.³⁶ Situated at the westernmost boundaries of this vast and rich area encompassing the Indian and western Pacific Oceans, the Arabs and the Byzantines provided the gateways through which the western world glimpsed the riches and tasted the goods of eastern Asia.³⁷ Only in the thirteenth century was Europe able to lift the mystery surrounding the eastern goods, first and foremost the spices and silk textiles.³⁸ Pepper, for example, a plant that originated in India, no longer grew in snake-laden alcoves in Western popular imagination.³⁹ Before the twelfth and the thirteenth century, however, Europe was fundamentally an importer of luxury ceramics, textiles, glass wares—hallmarks of economic and technological advances in the pre-industrial world—produced in the Byzantine and Muslim worlds as well as the Far East that extended all the way to China and Indonesia. In this economic sense, Byzantium's economic status and development, its economic rise and fall, look to be intimately connected with the similar direction the economies of the civilizations in the Middle East would take.

³⁶ Tampoe, *Maritime Trade*, 131-150. Silk cloth, porcelain, glass, flax and linen as well as alum were the major goods and products imported and exported intensely in this area well before the westerners had full access until about the second half of the thirteenth century.

³⁷ McCormick, *Origins*, especially Appendix 4, 852-972; K. Durak, "Commerce and Networks of Exchange between the Byzantine Empire and the Islamic Near East from the Early Ninth Century to the Arrival of the Crusaders" (Unpublished Ph.D. Dissertation, Harvard University, 2008); A. Shalem, "Objects as Carriers of Real or Contrived Memories in a Cross-Cultural Context," in Io. G. Deckers, M. Restle and A. Shalem, eds., *Mitteilungen zur spätantiken archäologie und byzantinischen Kunstgeschichte* 4 (Wiesbaden, 2005), 101-117.

³⁸ P. Freedman, *Out of the East. Spices and the Medieval Imagination* (Princeton, 2008), 134-141.

³⁹ *Ibid*; Laws, *Fifty Plants*, 155.

What, then, is the history of Europe when these developments were taking place in the East? First, Europe's population was in an upward swing since the seventh century and reached its maximum between ca. 1150 and 1250. The establishment of new villages, censuses, evidence for land clearance and deforestation, emigration, foundation of cities, effective and efficient farming, crop specialization, all of which we will mention further below, are good indications of this rise in the population now widely recognized and accepted by historians.⁴⁰ Initially, population increase was most intense in Northern Italy and the Low Countries but by the twelfth and the thirteenth century, it was a Europe-wide phenomenon.⁴¹

Technological improvements seem to have contributed to the population upsurge that Europe underwent from the tenth century on. We should first mention the heavy plough with its mould board and coulter that cut and turned over the heavier European soil, especially in Europe's north. Recent scholarship dates the heavy plough's first use to the early Middle Ages, specifically the fourth and the fifth centuries; but its full diffusion throughout Europe may have taken place thereafter as

⁴⁰ M. Bloch, *Feudal Society*, trans. L.A. Manyon and T.S. Brown (London, repr. 1989), 69; G. Duby, *Rural Economy and Country Life in the Medieval West*, trans. C. Postan (New York, 1968), 65-75; Genicot, *Rural Communities in the Medieval West* (Baltimore, 1990), 32-33; *idem.*, "On the Evidence of Growth of Population in the West from the Eleventh to the Thirteenth Century," in S. L. Thrupp, ed., *Change in Medieval Society. Europe North of the Alps, 1050-1500* (New York, 1969), 22-23. For the latest views on agricultural improvements that underlie population growth in Europe during the early post-Roman times see, J. Henning, "Strong Rulers—Weak Economy? Rome, the Carolingians and the Archaeology of Slavery in the First Millenium AD," in J. R. Davis, M. McCormick, *The Long Morning*, 49-50.

⁴¹ N. Bulst, "L'essor (Xe-XIVe siècles)," in J.-P. Bardet and J. Dupaquier, eds., *Histoire des populations de l'Europe* (Paris, 1997), 168-184.

opposed to the earlier view which dated the diffusion of the heavy plow to the eleventh century.⁴²

Alongside the use of the heavy plough, to support a rising population and to further fuel it another “perquisite” was agricultural intensification, crop specialization, and the development of technology.⁴³ The three-field rotation system, which allowed European peasants to get more yield from their crops over a longer section of the yearly cycle than was possible with the two-field system, dates from the post-Roman early middle ages, even though its full expansion in Europe dates from the eleventh and the twelfth century.⁴⁴ All of this suggests that if indeed there were more European mouths

⁴² Williamson argues for the eighth or the ninth century; Margaritis et al. think that the Romans used it as early as the third century. T. Williamson, *Shaping the Medieval Landscapes. Settlement, Society, Environment* (Cheshire, 2004), 119-120; E. Margaritis, M. Jones, K. Martin, “Greek and Roman Agriculture,” J. P. Oleson, ed., *The Oxford Handbook of Engineering and Technology in the Classical World* (Oxford, 2008), 158-174. White argues that heavy plough was used in the Frankish heartland as early as the seventh century: L. White, *Medieval Technology and Social Change* (Oxford, 1962), 56. F. W. Henning, on the other hand, argues that in Germany this type of plough was first used in the eleventh century: F. W. Henning, *Handbuch der Wirtschafts- und Sozialgeschichte Deutschlands* (Paderborn, 1991), vol. 1, 98. Wolff and Mauro, *Histoire générale du travail*, 93-95, confirm Henning using a Europe-wide evidence base (non-archaeological, however). Undisputable archaeological evidence is now available for the use of heavy plow during the early Middle Ages. See, J. Henning, “Germanisch-romanische Agrarkontinuität und-diskontinuität im nordalpinen Kontinentaleuropa- Teile eines Systemwandels? Beobachtungen aus archäologischer Sicht,” in D. Hägermann, W. Haubrichs and J. Jarnut, eds. *Akkulturation. Probleme einer germanisch-romanischen Kultursynthese in Spätantike und frühem Mittelalter* (Berlin, 2004), 405-417; *idem.*, “Strong Rulers—Weak Economy? Rome, the Carolingians and the Archaeology of Slavery in the First Millennium AD,” in J. R. Davis, M. McCormick, *The Long Morning*, 41; M. McCormick, “Discovering the Early Medieval Economy,” in *op. cit.*, 14-15.

⁴³ C. M. Cipolla, *Before the Industrial Revolution. European Society and Economy 1000-1700*, 2nd ed. (London, 1981), 177-182; R. Fleming, “Land Use and People,” in J. Crick and E. Van Houts, eds. *A Social History of England, 900-1200* (Cambridge, 2011), 15-37.

⁴⁴ Bloch is one of the first to comment on the significance of this agricultural innovation: M. Bloch, “Avènement et conquête du moulin à eau,” repr. in G. Savridès, ed., *Marc Bloch. Mélanges historiques* (Paris, 2011), 826; White and Genicot both agree that it was in use under the Carolingians. Genicot thinks

to feed by the end of the eleventh century, the agricultural and technological advances made during the early Middle Ages, their diffusion and accumulation (perhaps passing through intermittent periods of economic growth and contraction rather than growing steadily) over the following centuries eventually made it possible to meet the needs of such a population rise. Exciting new work is underway to understand how changes in climate affected the crop yields, technological advances, and human migration, among other factors, during the last two thousand years or so. Possible links between the post-Roman early medieval technological advances and climate change after ca. 200 A.D. have been pronounced recently.⁴⁵ Further research is underway to shed light on the causes, effects, and the extent of the Medieval Climate Anomaly (ca. 800 or 900 to ca. 1200-1400) that brought to western Europe warmer and mild conditions that may in fact have provided the favorable conditions during which the European economy appears to have grown exponentially.⁴⁶

it was practiced in places that had a certain type of soil. Genicot, *Rural Communities*, 44-45; White, *Medieval Technology*, 74-75. These advances are now dated to the post-Roman early medieval period. See, Henning, "Strong Rulers—Weak Economy?," 49-50.

⁴⁵ Henning, "Strong Rulers—Weak Economy?," 42; M. McCormick, U. Büntgen, M.A. Cane, E. R. Cook, K. Harper, P. Huybers, T. Litt, S. W. Manning, P. A. Mayewski, A. F. M. More, K. Nicolussi, W. Tegel, "Climate Change during and after the Roman Empire: Reconstructing the Past from Scientific and Historical Evidence," *Journal of Interdisciplinary History*, 43. 2 (2012), 169–220.

⁴⁶ M. McCormick, "Volcanoes and the Climate Forcing of Carolingian Europe, A.D. 750 to 950," (with Paul Dutton, Paul Mayewski, and Nick Patterson) *Speculum* 82 (2007), 865-895; E. Xoplaki, D. Fleitmann, and H. F. Diaz, eds., "Medieval Climate Anomaly," *Pages News* 19.1 (2011), 4-32, available on-line: http://www.pages-igbp.org/download/docs/NL2011-1_lowres.pdf (Accessed 1. 5. 2013).

The intensification of the uses of horse power, like field rotation and the development of heavy plough, dates from the eleventh century. Europe learned the harness, which reduced the traction power derived from the animal up to 90 percent, possibly from the Huns. So did the Europeans borrow the stirrup from the east, since the Chinese are known to have used it in the fifth century A.D.⁴⁷ The introduction of the iron nailed horse shoe (of uncertain origins) and the padded horse collar quadrupled the horse's effectiveness as the prime mover in particular during the tenth century.⁴⁸ Between the eleventh and the thirteenth century the uses of horse power especially intensified; Europe, in general, was doing most of its hauling on horses' backs and doing so in the fastest possible way.⁴⁹ Thus, by the end of the eleventh century, not only was Europe producing more for a more populous society but it was also traveling faster. All of these developments deeply affected the way Europeans ran their daily affairs and the way they conducted trade.

Before we mention trade, however, we should give a few more examples from the realm of technology. Mechanization is important because it frees hands to do other things. In the course of the eleventh century, the uses of power took much different

⁴⁷ White, *Medieval Technology*, 20-23.

⁴⁸ Duby, *Rural Economy*, 108-110; T. S. Reynolds, *Stronger than a Hundred Men. A History of the Vertical Water Wheel* (Baltimore, 1983), 47.

⁴⁹ White, *Medieval Technology*, 57-69; Henning, *Handbuch der Wirtschafts-und Sozialgeschichte*, 130-131; J. Langdon, "Horse Hauling: A Revolution in Vehicle Transport in 12th-13th -Century England?" *Past and Present* 103 (1984), 37-66.

paths on European soil and it is partially the intensity and the expanse of the application of mechanized power that differentiates Europeans from their Muslim and Byzantine counterparts after the end of the eleventh century.

Already in the early Middle Ages, the advancements the Europeans made in the application of mill technology applied to tasks other than the grinding of grain.⁵⁰ This extension of application of mill power was further expanded throughout Europe after the tenth century with tangible consequences by the eleventh century. After the ninth century, further advancements in mill technology and expansion of mills were made, for example, when windmill power was introduced to Europe possibly during the Crusades. Europe's extensive use of wind power became incomparable particularly during and after the twelfth century.⁵¹ The impact of the extension of mills (especially water mills) after about 1000 A.D. was such that because of the dams on river ways the fish were losing access to their spawning habitats increasingly between the end of the eleventh and the thirteenth century which instigated the development of marine fishing that changed the diets of populations.⁵² Thanks to the intensification of marine fishing

⁵⁰ Wilson, "Machines, Power and the Ancient Economy," 7-8.

⁵¹ Bloch, "Avènement et conquête du moulin à eau," 804-806; Duby, *Rural Economy*, 16-21; White, *Medieval Technology*, 80-85; Wolff and Mauro, *Histoire générale du travail*, 88-89; Henning, *Handbuch der Wirtschafts- und Sozialgeschichte*, 235-243; J. Langdon and J. Masschaele, "Commercial Activity and Population Growth in Medieval England," *Past and Present* 190.1 (2006), 35-81 (especially, 51-52).

⁵² J. H. Barrett, A. M. Locker, C. M. Roberts, "'Dark Age Economics' Revisited: the English Fish Bone Evidence AD 600-1600," *Antiquity* 78 (2004), 618-636, especially, 625-630.

more Europeans after 1000 A.D. were able to add fish to their diets, something that was not possible before then for populations dwelling away from sea or rivers.⁵³ The outcome of this direct impact on freshwater ecosystems in Europe was decline in the fish populations that returned to freshwater to reproduce, which they simply could not because of the mills and dams that blocked their paths. One such freshwater-spawning species, the sturgeon, was so reduced in thirteenth-century France and England that all sturgeon catch was reserved for the royalty alone. Thus, the impact of the growing population and technology had reached ecology- and diet-altering levels between the end of the eleventh and the thirteenth centuries.⁵⁴

Up to roughly the end of the eleventh century Byzantine and the Muslim civilizations were the main repositories of the ancient watermill technology and had the contemporary expertise on their application. According to Yaqubi (d. 897/8), for example, in 775 a Byzantine ambassador constructed a water milling complex for the Caliph in Bagdad.⁵⁵ It was possibly through the Muslims in Spain or through European interaction with the Muslims via the Crusades that the windmills of Iran first arrived in

⁵³ M. Salamon, A. Coppa, M. McCormick, M. Rubini, R. Vargu, N. Tuross, "The Consilience of Historical and Isotopic Approaches in Reconstructing the Medieval Mediterranean Diet," *Journal of Archaeological Science*, 35. 6 (2008), 1667-1672.

⁵⁴ In addition to the above see the earlier study by R. C. Hoffman, "Economic Development and Aquatic Ecosystems in Medieval Europe," *The American Historical Review* 101. 3 (1996), 631-669.

⁵⁵ Reynolds, *Stronger than a Hundred Men*, 117.

Catalonia by the end of the tenth century.⁵⁶ Yet, unlike the ship-making technology, the Byzantine and Muslim civilizations made little original contributions to the applications of watermills in particular. Eight major new Medieval applications of watermill—hemp mills, fulling mills, paper mills, oil, iron, wire mills, hydraulically operated “stamps,” metallurgical bellows—were fully applied in Europe during and after the thirteenth century.⁵⁷

What is significant in the applications of mill technology is the strong connection it has with the growth of industries in Europe. Mills were used to operate the huge machinery of the wool, hemp and later the silk textile industries. Sugar mills and tanning mills are known from the second half of the twelfth century; the earliest certain example of a paper mill (1276) is from Fabriano in the Marche, Italy.⁵⁸ Thus, as a result of the expansion of mills and the mechanization of production processes by the end of the twelfth century Europe was on the verge of becoming an exporter of the products that it formerly imported from Byzantium, the Muslims, and indirectly until the thirteenth century, from the Far East.

⁵⁶ Wolff and Mauro, *Histoire générale du travail*, 89. Later scholarship seems to agree with this view: A. R. Lucas, “Industrial Milling in the Ancient and Medieval Worlds. A Survey of the Evidence for an Industrial Revolution in Medieval Europe,” *Technology and Culture* 46. 1 (2005), 10.

⁵⁷ Reynolds, *Stronger than a Hundred Men*, 94; Wilson, “Machines, Power and the Ancient Economy,” 7-8.

⁵⁸ Reynolds, *Stronger than a Hundred Men*, 76, 84.

Watermill technology was closely related to the development of industries and trade in Europe as we have mentioned above. One of Europe's first extensive export items, wool cloth industry would not have been as successful as it was if it were not for the expansion of the fulling mills and the horizontal treadle looms by the thirteenth century.⁵⁹ Again, scholars and archaeologists may disagree about the dating and provenance of the first fulling mill and the horizontal loom, but they rarely disagree about the date of the expansion of these technologies in Europe: by the early thirteenth century at the very least fulling mills had reached Poland.⁶⁰ Apart from the speedy advancement of the textile industry by the end of the twelfth century European fine ceramic and glass industries were also on the brink of bettering the previously more advanced Byzantine and Muslim producers of fine ceramics and glasswares by the end of the twelfth century by the artistry, quality and advanced techniques of their products.⁶¹

Again by the end of the twelfth century the volume of commerce increased remarkably in Europe together with the numbers of specialized craftsmen within the Medieval guild system, and with them the regions specialized in certain types of

⁵⁹ P. Malanima, *I piedi di legno. Una macchina alle origini dell'industria medievale* (Milan, 1988), 80, 93-96. For further discussion of the horizontal loom, see below Part 3.

⁶⁰ Reynolds, *Stronger than a Hundred Men*, 83.

⁶¹ The early development of the fine ceramic industry in Italy is discussed further detail below in Part 2. Venice is thought to be the home of Europe's glass industry which might have first began in the tenth and the eleventh centuries: Wolff and Mauro, *Histoire générale du travail*, 118-119.

industries such as north Italy (silk textiles, glass, fine ceramics), Flanders (wool cloth) and England (wool production, wool cloth).⁶² Byzantium and the Middle East collectively could not counter these developments particularly after Western merchants gained direct access to the silk and spice routes following the second half of the thirteenth century.

The diffusion of technological advances by the end of the twelfth century fanned the growth of trade, and the growth of trade, in return, opened Europe up to new markets and resources. The opening of the silk road, which the so-called *pax Mongolica* facilitated, allowed the Europeans direct access to the riches of the East. One of the important contributions of this dissertation is its study of the changing volume of Byzantine fine ceramic and textile exports to both the East and West between the end of the eleventh, through the thirteenth century when the Europeans had established continuous contact with the East. By providing Europeans with direct access to the wealth of the East in the latter half of the thirteenth century, the Mongol epoch not only shifted European interest from the Middle East and the goods it provided or transmitted to the products and natural wealth of the East. As a consequence, the

⁶² Persson, *An Economic History of Europe*, 30; C. M. Belfanti, "Guilds, Patents, and the Circulation of Technical Knowledge," *Technology and Culture*, 45. 3 (2004), 569-589; C. M. Cipolla, "The Diffusion of Innovations in Early Modern Europe," *Comparative Studies in Society and History* 14. 1 (1972), 46-52; S. R. Epstein, "Craft Guilds, Apprenticeship, and Technological Change in Preindustrial Europe," *The Journal of Economic History* 58. 3 (1998), 684-713; R. Britnell, "Commerce and Markets," in J. Crick and E. Van Houts, eds. *A Social History of England, 900-1200* (Cambridge, 2011), 183-184.

Mongol epoch also laid the grounds for the voyages of discovery in the fifteenth century.⁶³ After the end of the twelfth century not only the West was already producing its own luxury goods, but for the first time in its history it also had direct access to the mythical wealths of India and the Far East. This dissertation studies in detail the impact of these wider developments through the prism of the fine ceramic and textile sectors of the Byzantine economy.

It is important to note that thirteenth century corresponds exactly to the period when the economy in the West was “taking off.”⁶⁴ The “commercial revolution” of the thirteenth century was inextricably tied to a corresponding longer term upward trajectory, since roughly the seventh century, in population rise, growth of industrial and agricultural production, markets, monetization, progress in technical know-how, that first led to the discovery of the New World, and eventually to the industrialization

⁶³ P. Jackson, “The Mongols and Europe,” in D. Abulafia, ed., *The New Cambridge Medieval History* c. 1198-c. 1300 (Cambridge, 2008), vol. 5, 719; V. Ciočiltan, *The Mongols and the Black Sea Trade in the Thirteenth and Fourteenth Centuries*, trans. S. Willcocks (Leiden, 2012), 80-113; A. P. Martinez, “Institutional Development, Revenues and Trade,” in N. di Cosmo, A. J. Frank, P. Golden, eds., *The Cambridge History of Inner Asia. The Chinggisid Age* (Cambridge, 2009), 89-108; F. Schmieder, “The World of Codex Cumanicus, The Codex Cumanicus in its World,” in F. Schmieder and P. Schreiner, eds., *Il Codice Cumanico e il suo mondo: atti del colloquio internazionale* (Rome, 2005), xiii-xix; N. di Cosmo, “Venice, Genoa, The Golden Horde, and the Limits of European Expansion in Asia,” in *Il Codice Cumanico*, 279-296. On the general political and economic situation of Asia Minor in the thirteenth and fourteenth centuries see, O. Turan, *Türkiye Selçukluları Hakkında Resmi Vesikalar. Metin, Tercüme ve Araştırmalar* (Ankara, 1958); C. Cahen, *Pre-Ottoman Turkey: A General Survey of the Material and Spiritual Culture and History c. 1071-1330*, trans. J. J. Williams (London, 1968); A. Savvides, *Byzantium in the Near East: its Relations with the Seljuk Sultanate of Rum in Asia Minor, The Armenians of Cilicia and the Mongols A.D. c. 1192-1237* (Thessalonike, 1981); C. Bektaş, *Selçuklu Kervansarayları. Korunmaları, Kullanımları Üzerine bir Öneri* (Istanbul, 1999).

⁶⁴ R. S. Lopez, *The Commercial Revolution of the Middle Ages 950-1350* (Cambridge, 1976), 56-84.

of Europe. These developments reach a first crescendo between the end of the eleventh and the end of the thirteenth centuries.⁶⁵ Specifically, by the thirteenth century, it was Europe's turn to herald technical advancements that allowed its merchants and armies to sail with new charts (portolans) on bigger and bigger three-masted cogs, or round ships (essentially, carracks), fitted with lateen sails and a new type of rudder system that allowed them eventually to touch the shores of the New World that they stumbled upon while on the quest for China and India.⁶⁶ Evolving from monastic and cathedral schools and beginning to evade the Church's authority, toward the end of the twelfth century universities were officially founded in Europe (primarily in Italy and France, primarily in the field of law and medicine) and their proliferation in cities in the

⁶⁵ The literature on these developments is immense. In addition to the sources utilized above, I will refer here only to some of the essential and more recent overviews that refer to older works on economic development in Europe since the tenth century: R. de Roover, "The Traveling Trade before 1300," in *Cambridge Economic History of Europe*, M. M. Postan, E. E. Rich and Edward Miller, eds., vol. 3 (Cambridge, 1965), 46-69; C. Verlinden, "Markets and Fairs," in *ibid.*, 119-153; G. Duby, *Rural Economy*, 108-129; E. Ennen, *The Medieval Town*, trans. N. Fryde (Amsterdam, 1979), 137-144; C. M. Cipolla, *Before the Industrial Revolution*, 149-182; P. Spufford, *Money and its Use in Medieval Europe* (Cambridge, 1988), 245-263; R. Bartlett, *The Making of Europe. Conquest, Colonization and Cultural Change 950-1350* (New Jersey, 1993), 167-196; M. McCormick, *Origins of the European Economy. Communications and Commerce A.D. 300-900* (Cambridge, 2001), 778-794; S. R. Epstein, "Introduction. Town and Country in Europe, 1300-1800," in S. Epstein, ed., *Town and Country in Europe, 1300-1800* (Cambridge, 2001), 6, 22; S. C. Ogilvie, M. Cerman, *European proto-industrialization* (Cambridge, 1996); M. North, *Europa Expandiert 1250-1500* (Stuttgart, 2007), 17-24.

⁶⁶ The thirteenth century is called the Great Age of Sail because of a number of breakthroughs that were initiated or further advanced during that period such as the shift from the galley to ocean-going cogs and carracks, the application of the pintle-and gudgeon rudder and the use of portolans. See, J. F. Guilmartin, *Gunpowder and Galleys. Changing Technology and Mediterranean Warfare at Sea in the Sixteenth Century* (Cambridge, 1974), 57, 120; L. V. Mott, *The Development of the Rudder. A Technological Tale* (London, 1997); S. McGrail, *Boats of the World. From the Stone Age to Medieval Times* (Oxford, 2001), 234-248; Block, *To Harness the Wind*, x, 18-19, 30-35; Pryor and Bellabarba, "Medieval Muslim Ships of the Pisan Bacini," 104-110.

thirteenth century mirrors the developments in all other arenas that we touched upon above.⁶⁷ New forms of political authority and government arose at the end of the twelfth century, partly as a reaction to the “heavily lorded” society defined by insecure, unstable crises of the previous two centuries.⁶⁸ Literacy grew, with it documents proliferated; especially after the second half of the twelfth century, when paper slowly replaced parchment as the medium for keeping record of things.⁶⁹ Thus, at the end of the thirteenth century Europe was a much altered society, having taken significant leaps forward in terms growth that impacted its economies and governments among all other aspects of societal living.

This so much so that in the second half of the fourteenth century, even though its population was drastically reduced after the Black Death, recovery was relatively swift. The progress made especially during the preceding two centuries gave Europe an economic push that allowed it to revive quickly. The new Europe not only traveled to

⁶⁷ C. H. Haskins, *The Rise of Universities* (Ithaca, 1957); E. Powicke and A. B. Emden, eds., *The Universities of Europe in the Middle Ages* (Oxford, 1936; repr., 1987); W. Rüegg, *Geschichte der Universität in Europa* (Munich, 1993), vol. 1, 279-320; J. Verger, “Universiät,” in *Lexikon des Mittelalters* (Munich, 2003), vol. 8, 1250-1255.

⁶⁸ T. Bisson, *Crisis of the Twelfth Century* (Princeton, 2009), especially, 22 (quotation), 271, 578-79.

⁶⁹ M. T. Clanchy, *From Memory to Written Record. England 1066-1307*, 3rd edition (London, 2013), especially, 19, 48-82, 122, 137-146.

and traded with the remotest parts of the world but it was also increasingly better educated, thought, even punished, and dressed differently than previously.⁷⁰

By the end of the thirteenth century and, in particular, the fourteenth century, the tables with respect to the old eastern dynamos of the medieval Mediterranean economy were almost completely turned with regard to imports and exports between Europe and the Middle and the Far East. The economies in the Middle East, of which Byzantium represents a key part, were particularly adversely affected. These economies were no longer exporting their luxury textiles, ceramics, glass and other, mainly luxury, products to Europe but themselves became a large market for the manufactured European goods. Their own natural resources, which were formerly used to fuel local industries, were now exported as raw materials to supply the European economies. For example, by 1300 Lucca was the dominant silk weaving city of Western Europe. Raw silk that fed this industry came from not only Sicily and Calabria but also from Asia

⁷⁰ In addition to n. 59: C. H. Haskins, *The Renaissance of the Twelfth Century* (Cambridge, Mass., 1927), 384; J. Kaye, *Economy and Nature in the Fourteenth Century. Money, Market Exchange, and the Emergence of Scientific Thought* (Cambridge, 1988), 15-20; By 1300 prisons were a regular part of the urban scene in Italy: G. Geltner, " 'The Best Place in the World:' Imagining Urban Prisons in Late Medieval Italy," in *Cities, Texts and Social Networks*, 400-100. *Experience and Perceptions of Medieval Urban Space*, C. Goodson, A. E. Lester and C. Symes, eds. (Cornwall, 2010), 263-278; S. M. Stuard, *Gilding the Market. Luxury and fashion in Fourteenth-Century Italy* (Philadelphia, 2006).

Minor. The fabrics of Lucca ended up supplanting Middle-Eastern fabrics, themselves originally substitutes for Chinese fabrics.⁷¹

Similar observations may be made for the linen, cotton and wool- cloth industries; European goods of varying prices and different qualities invaded the eastern markets. In 1300 some 300 firms were engaged in wool cloth industry of Florence.⁷² By about 1400 this city too was a major producer of silk cloth while its imports from the East was mostly limited to spices, cotton, alum, dyes and perfumes.⁷³ This “European invasion” of the Byzantine and Muslim markets had reached such levels that by 1350 the Middle East was importing fine pottery, glass, and even soap, from Europe. At around the middle of the fourteenth century the French royal family was purchasing its “oriental” carpets from Paris, where they were being manufactured, even though “a few” were still being imported from the Levant.⁷⁴

These are the developments whose beginnings are captured in this dissertation through the lens of the immediately preceding period in Byzantium. By the end of the thirteenth century, grain, cotton, oil, fruit, animal products, silk, linen, wax, alum and

⁷¹ P. Spufford, “Trade in Fourteenth-Century Europe,” in M. Jones. ed., *The New Cambridge Medieval History c. 1300- c, 1415* (Cambridge, 2000), vol. 5, 166.

⁷² J. M. Najemy, *A History of Florence 1200-1575* (Malden, 2006), 101.

⁷³ R. A. Goldthwaite, *The Economy of Renaissance Florence* (Baltimore, 2009), 282-283; 286-287. I would like to thank Alex Medico More for this reference.

⁷⁴ *Ibid.*, 172-176.

wool constituted the primary exports from the Middle East, specifically from Byzantium, while the Byzantines were paying for European manufactured goods, Lombard and Flemish cloth, velvets and fine cotton cloths, metalwork, fine ceramics.⁷⁵

In short, in this dissertation we will be tracking the epochal changes in the economic relations between western Europe and the eastern Mediterranean, from the twelfth century when Byzantium was still exporting its ceramics and textiles to Europe and the East, and across the next century when Byzantium's capacity to do so was significantly reduced in the face of increasingly fierce competition that the Byzantine industries faced. Laiou rightly termed the thirteenth century as the "lost century," as far as the global capacity of the Byzantine economy is concerned.⁷⁶ Exactly in this economic sense, the Byzantine industries lost their competitive edge to their rivals in the West, who traveled as far as China thanks to the Mongols, even though the thirteenth century was also a century when cultural interactions between the Byzantines and their Western conquerors were deeper and more pervasive.⁷⁷ Until now, the story of the rise of

⁷⁵ Laiou-Thomadakis, "The Byzantine Economy in the Mediterranean Trade System; Thirteenth-Fifteenth Centuries," *DOP* 34/35 (1980/1981), 177-222.

⁷⁶ Laiou, "The Byzantine Economy: An Overview," *EHB* 3, 1158; Laiou and Morrisson, *The Byzantine Economy*, 166.

⁷⁷ For a long time after the Fourth Crusade the local Greeks believed that they would expell the Westerners from their lands. Even as they failed to do so the cultural ties between the Greeks and the Westerners became entrenched as decades passed. See, T. Shawcross, "Identities and Allegiances in the Eastern Mediterranean after 1204," in J. Herrin and G. Saint-Guillain, eds., *Identities and Allegiances in the Eastern Mediterranean after 1204* (London, 2011), 9-45. Also see *eadem.*, *The Chronicle of Morea. Historiography in Crusader Greece* (Oxford, 2009), especially, 246-247, where she argues that the *Chronicle of Morea* reflects

Western, and particularly Italian, trade and industry has been viewed from the vantage point of the economic “winners,” especially the commercial towns of Italy, in Europe’s first bound into proto-globalization. This dissertation turns the tables and offers an in-depth of analysis of the economic developments during the twelfth and the thirteenth centuries from the perspective of the Byzantines who experienced the negative economic consequences of Western economic growth following the second half of the thirteenth century when the eastern and western parts of the then known-world were connected as never before after the decades following the Mongol invasions.

the new (Western) residents’ reactions to mixed marriages and conversions to the Orthodox rite which were apparently rife during the first half of the fourteenth century in the Peloponnese.

Part 1 Money and its Circulation in Italy, Greece and Western Asia Minor

Introduction. Circulation Patterns of Byzantine Coins in Italy and Asia Minor: an Overview.

Coin circulation, politics and the economy correlated strongly in the medieval Mediterranean. The strength of the correlation can be seen in the eastern and western borders of the Byzantine Empire from the last quarter of the eleventh century through the twelfth. The year 1071 marks the loss of the last Byzantine holding in the West, Bari, to the Normans. The same year the Byzantines lost the battle of Manzikert to the Seljuk Turks, whose incursions into Asia Minor changed the social, religious, political and to a degree, the economic composition of the region in a conclusive manner.

The draining off of Byzantine power from southern Italy, on the one hand, and Asia Minor, on the other, left behind a trail of tangible archaeological and written evidence. From the remaining evidence the abrupt force of 1071 can best be seen via the surviving Byzantine coins, the so-called anonymous *folles*—copper coins issued for the first time under John I Tzimiskes without the issuer's name and that remained in circulation until the numismatic reforms of Alexios Komnenos in 1092—in the eastern and the western borderlands of the empire. It is highly significant in this regard that the numismatic trails the events from the turn of the eleventh century left in Byzantine Italy and Asia Minor mirror each other. In Italy, Ermanno Arslan's comprehensive and regularly updated catalog of coin finds refers to a total of sixty-two sites with Byzantine

anonymous *folles* deposits; forty-seven (about seventy-six percent) hail from Campania, Calabria, Sicily, but above all from, Apulia, while fifteen (about twenty-four percent) are from northern Italy.¹ In the twelfth century the numbers of Byzantine coin finds on Italian soil drop drastically. The same phenomenon is apparent in central and eastern Asia Minor which almost lost signs of obvious contact with the Byzantine political and economic zone of influence after the eleventh century. In the Black Sea region and south west Anatolia, however, Komnenian coins attest to continued Byzantine presence and influence on the ground there in the twelfth century. To underscore the acute difference in Byzantine coin circulation in Italy and eastern Asia Minor before and after 1071, two recent figures should suffice, one from each respective region. From the Apulian site of Cannes 773 of those tenth- and eleventh-century *folles* are recorded compared to only thirty nine identified post-eleventh century Byzantine coins from all of Italy.² Likewise, in eastern Asia Minor we see an abrupt break in Byzantine coin supply at the end of the eleventh century, although some countermarked Byzantine *folles* remained in

¹ Arslan, *Repertorio*. Byzantine *folles* issued before the devaluation in 1067 are found more often in hoards. See B. Callegher, "Monete medioevali dei secoli XI-XIII in Friuli. Ripostigli e singoli rinvenimenti," in R. Härtel, *Die Friesacher Münze im Alpen-Adria-Raum* (Graz, 1996), 342. Type C folles from the reign of Michael IV (1034-1041), are so common in southern Italy that Bendall thinks there was a western mint producing these coins. Currently, all of the known Byzantine *folles* are minted in Constantinople. Callegher, "Presenza di 'Folles Anonimi' in Italia settentrionale: un' ipotesi interpretativa," *Numismatica e Antichità Classiche* 28 (1994), 299-301. Also see, Callegher and C. Morrisson, "Miliareni de follibus: La trouvaille de folles byzantins de Cannes (milieu du Xe siècle)," in E. Cuozzo, V. Déroche, A. Peters-Custot and V. Prigent, eds., *Puer Apuliae. Mélanges offerts à Jean-Marie Martin*, (Centre de recherche d'histoire et civilisation de Byzance. Monographies 30), (Paris, 2008), 553-550; For monetary differences between Calabria and Campania see Travaini, *Monete e storia nell'Italia medievale* (Rome, 2007), 140.

² Callegher and C. Morrisson, "Miliareni de Follibus," 553.

circulation under Turkish rule following 1071, as the Mardin Hoard shows.³ Amorium, for example, rapidly became a settlement dependent on Seljuk issues in the course of the last quarter of the eleventh century, following the trace left by the anonymous *folles*, of which a total of a little over 250 is recorded.⁴ Both for Italy and Asia Minor the same type of evidence emerges at every excavated site; the anonymous *folles*, which were issued for about a century from 970 AD to the reform of Alexios I in 1092, are the last numismatic testimonies of former Byzantine economic and political power in the eastern and the western borderlands of the empire.

Part One interprets the post-eleventh-century numismatic evidence. It does so in terms of the distribution of Byzantine coins not only in areas that were completely lost to the Byzantines by the end of the eleventh century, but also in areas under Byzantine control from the end of the eleventh through the thirteenth century. The general disappearance of Byzantine coins in eastern Asia Minor and in southern Italy is easily explained by Byzantium's loss of political control over these areas, but the numismatic

³ N. M. Lowick, S. Bendall and P. D. Whitting, *The Mardin Hoard* (Ringwood, 1977). According to the authors the non-Byzantine portion of the hoard is not well-represented. The Byzantine portion of the hoard comprised about 13,000 Byzantine coins of which 2,204 bore Islamic countermarks (about 17 percent). The remaining were three Islamic coins, one of the Artukid dynasty from the mid-twelfth century; the rest are two Seljuk coins, both issued in the first half of the thirteenth century. The hoard, acquired by Baldwin and Sons in 1972 in Munich, has a 1228 A.D. *terminus post quem* and it hails from south-eastern Turkey, though not specifically from Mardin. Overall, the hoard suggests that perhaps about seventeen percent of the anonymous *folles* were in use after 1071 in eastern Turkey, although it is not clear when the countermarks were made and whether the coins were hoarded for their bullion value or were indeed circulating under Turkish rule. I thank Prof. Dimitar Angelov for the reference.

⁴ Personal communication from Dr. Lightfoot based on yet unpublished material. Most of the anonymous *folles* are eleventh-century issues. There is a single copper *folle* of Alexios I Komnenos' pre-reform issue.

evidence that survives thereafter in southern Italy, Greece and western Asia Minor proves more complicated and more interesting. Military expeditions and commercial contacts have so far been the favored explanations of the presence of post-eleventh-century issues of Byzantine coins in parts of Italy and Turkey that were no longer under the political control of the Byzantines after the eleventh century.⁵ However, the presence of Byzantine coins surviving in Italy and Asia Minor is interpreted, it is worth considering the light they shed and that is what we will do first in the introduction.

I will use numismatic evidence from Italy and eastern Asia Minor and contrast it with the main evidence from areas still under Byzantine control in the twelfth century and areas partially under Byzantine control after the Fourth Crusade. The Fourth Crusade adds another layer of complications to the pattern of distribution and use of coins in mainland Greece and western Asia Minor as new coins were then introduced to the region even as the supply, distribution, and use patterns of the old and the new coins remain imperfectly understood.

The rest of this Part divides across temporal and geographic lines to facilitate presentation and analysis. In three chapters I will discuss, first, the post-eleventh-century political situation involving the regional differences and connections between Greece and western Turkey. I will then consider the distribution patterns of post-

⁵ See pp. 42, 64 below for some of these interpretations.

eleventh-century data. The distribution patterns and overall changes of post-eleventh-century data should be viewed in relation to the overall picture that emerges from a study of the coins from areas still under Byzantine control in the twelfth and thirteenth centuries. The second chapter of this Part analyzes the twelfth-century pattern of production and distribution of coins in Greece and western Turkey by undertaking an evaluation of the hoards and contrasts that pattern with the thirteenth-century pattern. To balance and check the results of the hoard evidence with that on the single finds, the third chapter will focus on the coin finds from excavations from mainland Greece and western Asia Minor, in that geographic order.

Eleventh and Post-Eleventh Century Variations in Coin Circulation between Italy and Eastern Asia Minor

Both in southern Italy and eastern Turkey the end of the overwhelming presence of the anonymous *follis* series coincides with the demise of the Byzantine rule over these areas. Yet, the trends in each area were not the same. In southern Italy, Byzantine issues continued to circulate, even though drastically reduced in number. In eastern Turkey, by contrast, the connection to Byzantium appears to have been literally cut off, for no such continuity can be documented there.⁶ The overall absence of post-eleventh-century Byzantine coin finds in eastern Turkey emerges equally clearly from the site-by-site

⁶ Excluding the northeastern Turkey, the Black Sea region.

discussion on Byzantine fine ware production and distribution.⁷ The lack of Byzantine coin data from eastern Turkey cannot be attributed to archaeologists' negligence in recording, because even the relatively intermittent presence of the crusading armies in Asia Minor has left a small but clear numismatic trail on record.⁸ In short, then, because I am aware of no post-eleventh-century Byzantine coin issues from eastern Turkey this region requires no further discussion in this chapter. The decision not to include the Turkish Black Sea region, on the other hand, has no other reason than the gaping void in archaeological studies there due to lack of interest in excavating this otherwise promising, pristine area particularly for a study of the economy of the thirteenth century and beyond.⁹ Overall, the data, or lack of it, shows that the numismatic

⁷ We do not know what portion of the pre-reform Byzantine coins was used under Turkish rule in the twelfth century. See the discussion on the Mardin Hoard in n. 3 above. Regardless, twelfth and thirteenth century Byzantine issues have left little to no trace in eastern Turkey.

⁸ Grierson, "A German Crusader's Hoard of 1147 from Side (Turkey)," in *Lagom. Festschrift für Peter Berghaus zum 60. Geburtstag am 20. November 1979* (Münster, 1981), 195-203; S. Atlan, 1947-1967 *Yılları Side Kazıları Sırasında Elde Edilen Sikkeler* (Ankara, 1976), 95. Kekova and Anaia (mod. Kadıkalesi) produced thirteenth- and fourteenth-century German, Hospitaller as well as Latin coins issued in Thessalonike, while Yumuktepe—yet undated—Crusader coins, and Gritille, "Eight Crusader folles with Arabic countermarks." All the information except that on Gritille is based on personal communication from Dr. Ahmet Tolga Tek, Prof. Zeynep Mercangöz and Prof. Gülgün Köroğlu, respectively. On Gritille see, S. Redford, *The Archaeology of the Frontier in the Medieval Near East: Excavations at Gritille, Turkey*, Archaeological Institute of America, Monographs, New Series 3 (Philadelphia, 1998), 159-160. On Anaia see Z. Mercangöz, "Emporion ve Kommerkion Olarak Anaia'nın Değişken Tarihsel Yazgısı," in A. Ödekan, E. Akyürek and N. Necipoğlu, eds., *Change in the Byzantine World in the Twelfth and Thirteenth Centuries* (Istanbul, 2010), 284.

⁹ It looks like this disinterest will not last much longer. O. Doonan's *Sinop Landscapes. Exploring Connection in a Black Sea Hinterland* (Philadelphia, 2004) is the first publication of possibly a series to come on the Sinop region and its connections with the rest of the Black Sea, as part a much larger multidisciplinary Black Sea Trade Project which aims to study the "contact and culture formation around the Black Sea in terrestrial and maritime environments." (p. xvi) Dr. Gülgün Köroğlu recently started the excavation of a

evidence alone suggests that the political and economic contacts between post-eleventh-century Byzantium and the polities of eastern Asia Minor were not significant, unlike the ties the empire clearly had in the Balkans, and to a lesser degree continued to have in southern Italy. The coinage in the Balkans (excluding Greece) is not included here either, because the Balkan connection waned over the course of the thirteenth century, and the proto-national Bulgarian state began to issue its own coinage. The south Italian connection with southern Greece, on the other hand, blooms, obviously no longer under Greek but rather under French (Angevin) rule.

The presence (or not) of Byzantine coins in non-Byzantine archaeological settings testifies to the existence of communications with Byzantium, directly or indirectly. The main difficulty revolves around defining how they got there after the end of Byzantine rule. The overall size (amount) of the finds, the types of denominations found as well as the location (geographical), and the contexts (archaeological) in which they were found form essential criteria that need to be analyzed carefully.¹⁰ A large number of coins in a short time span require a different interpretation than a much more limited but consistent presence of coins over a longer time span. The projected “age” of the coins at the time of deposition is another factor that may reveal important factors about the

seventh-century church in Sinop (Balatlar Kilisesi) in 2010. I would like to thank Dr. Scott Redford – himself currently working on Seljuk epigraphy in the Sinop area—for these references.

¹⁰ See Grierson’s evaluation on the possible meanings of hoards and stray finds in archaeological settings, below, Part 1, n. 111- 112.

circulation patterns of old or newly issued coins. There could also be economic reasons; a certain denomination might be filling a need in another monetary system. Military activity and travel (pilgrimage included) could also account for the presence of coins outside their local contexts. Therefore, some of the relevant questions that could be posed to the evidence are: Did these coins circulate alongside other coins? Did they occupy a niche otherwise unfilled by local coinage? Were they available because of trading contacts, travel, or the presence of local soldiers paid in them? In short, trade can be one possible reason; however, there are other equally plausible reasons such as economic need, travel and military activity. As we will see below, the overall disappearance of the Byzantine coins from southern Italy and eastern Turkey are attributed to Byzantium's loss of political control over these areas. The possible meanings of the presence of Byzantine coins on Italian soil and *vice versa* after the eleventh century will be discussed in detail below. Before we turn to the analysis of Italian evidence, let us cast a quick glance at the numismatic context of the post-eleventh-century eastern Mediterranean world and Byzantium's changing role in it.

The Numismatic Context from the End of the Eleventh through the Thirteenth Centuries

Some of the less well-known and understood regional peculiarities of Byzantium and its later numismatic history might well date back to the Komnenian period, but in terms of Byzantium's place in the numismatic history of Europe, the thirteenth century

emerges as the period in which Constantinople begins to adapt for the first time to the long-standing silver standard of the West. Significantly, when (starting in the 1250s) the West was ready to issue gold coins, Byzantium gradually became less able to do so, until it abandoned issuing gold completely in the 1350s.¹¹ Before the thirteenth century, the picture was vastly different in Byzantium and the West in terms of the metals used in coin production in these areas. For example, Byzantium had traditionally used a tri-metallic monetary system which remained in use, at least nominally, until after the reign of Andronikos II, more precisely until the 1350s, when gold ceased being part of the system that now used silver, copper and their alloy only. Western coinage, on the other hand, with the exception of southern Italy and Sicily, areas where Byzantine and Islamic presence had been strong, had been monometallic—silver based—since the seventh century in the north and since the age of Charlemagne in areas under Carolingian control, but evolved into a bimetallic multi-denominational system in the mid-thirteenth century with the reintroduction of gold.¹² The multiplying scale of economic transactions in the burgeoning economies of western Europe fostered this need for larger units of value. The late thirteenth and early fourteenth centuries, seen from this perspective, constituted a turning point for the monetary circulation in both

¹¹ Grierson, *Catalogue*, vol. 5.1, 10-11; 176-193 for the best description of the decline of the gold standard in Byzantium and its abandonment during the reign of John V (1341-1391).

¹² See P. Spufford, *Money and its Use in Medieval Europe* (Cambridge, 1988), especially, 267-288; MEC; L. Travaini, *Monete e storia nell' Italia medievale* (Rome, 2007), 49-50.

Byzantium and its immediate western neighbors. By the middle of the fourteenth century, Byzantium effectively lost its status as the state that once issued the gold coin, the *nomisma* or *hyperpyron* (which literally means “highly refined, pure”),¹³ known to scholars as the “Dollar of the Middle Ages,” which had served both local and international monetary exchanges. Venetian coinage, on the other hand, emerged as the new equivalent of the *nomisma* which slowly but surely gained a similar international status. The Venetian issues first established themselves as the coinage of reference in northern Italy by the 1270s and then expanded their prestige and circulation into the eastern Mediterranean by the middle of the fifteenth century, when the gold *ducat* enjoyed full international recognition and use.¹⁴

*Table 1. 1. Coins/Monies of Account and their Respective Values with respect to the Hyperpyron 1092–1204*¹⁵

<u>GOLD</u> <i>Hyperpyron nomisma</i>	<u>ELECTRUM</u> <i>Nomisma trachy aspron</i>	<u>BILLON</u> <i>Aspron trachy (stamenon)</i>	<u>Carat/keration</u> (money of account)	<u>Follis</u> (money of account)	<u>COPPER</u> <i>Tetarteron</i>	<u>COPPER</u> Half <i>tetarteron</i>
1	3	48	(24)	(288)	864?	1,728?

¹³ P. Grierson, “Hyperpyron,” *ODB* on-line. (Accessed 9. 11. 12).

¹⁴ Saccocci, “Rinvenimenti monetali di epoca medievale nelle Venezie,” in *idem.*, *Contributi di storia monetaria delle regioni adriatiche settentrionali (Secoli X-XV)* (Padova, 2004), 197-207.

¹⁵ Morrisson, *EHB*, 924.

The twelfth century was, in other words, the last century when Byzantium had a stable and internationally valued monetary system. That system itself was laid out by the first Komnenian ruler, Alexios I, who came to the throne a decade after the twin territorial losses of 1071. The monetary reform of Alexios I in 1092 is deemed a major improvement over the eleventh century system, one that simplified and standardized the whole monetary and taxation systems of the time.¹⁶ According to the new monetary order, the concave gold *hyperpyron* was the standard against which the rest of the denominations were measured. The *hyperpyron* was about 85 percent (20 carats) gold, and retained that metal content until the end of Alexios III's reign (1195-1203). The electrum denomination, known as *trikephalon* ("with three heads") or *aspron trachy* ("white and rough," i.e. concave),¹⁷ valued at a third of the *hyperpyron* until the reign of Isaac II (1185-1195),¹⁸ was essentially (with about 70-80 percent silver content) a silver coin with roughly equal amounts of gold and copper. The billon *trachy*, otherwise called

¹⁶ Hendy, *Coinage and Money*, 57ff; Morrisson, "La Logarikhè: réforme monétaire et réforme fiscale sous Alexis Ier Comnène" repr. in *eadem.*, *Monnaie et finances à Byzance: analyses, techniques* (London, 1994), VI, 419-464; Hendy, *Catalogue*, 4. 1, 11, 30, 39.

¹⁷ The *trikephalon* ("three-headed") derives its name from three images ("heads") on it; one (Christ or Mary) on the obverse and two on the reverse. *Aspron trachy* means "white and rough." The coin is white because of its silver content and "rough," i.e. concave as opposed to flat. For all of these definitions see Papadopoulou, "De l'unité à l'éclatement: la monnaie et son usage dans le monde byzantin (1092-1261)," Université Paris I (2007), vol. 1, 7-8, 28-29, 55-57. For a very illuminating discussion of the alternative names used for the twelfth century Byzantine coins see *ibid.*, vol. 1, 6-77 with a useful table on vol. 1, 78.

¹⁸ Morrisson's table from *EHB*, 924 which I used to lay out the denominations, makes their initial relations clear but does not give a good sense of the consistent lowering of the gold and silver content of the *hyperpyron* and the electrum *trachy* starting under the rule of Manuel I Komnenos (1143-1180). For that, one can now consult Papadopoulou's table in "De l'unité à l'éclatement," vol. 1, 102-103.

the *stamenon* ("standing," i.e. standard)¹⁹, on the other hand, was much less stable in terms of its metal content as it was not controlled nearly as strictly as the *hyperpyra* and the electrum *trachy*, that is, coins that contained gold; its silver content varied between six and two percent. It was essentially a copper coin with small amount of silver (hence billon), 1/48th of the *hyperpyron*, and it seems to have been used often in daily transactions.²⁰ Its silver content began declining around the mid-twelfth century. During the reign of John II the billon *trachy* was based on a 6.0-7.0 percent silver alloy. For the first two issues of Manuel I the silver content continued that of his predecessor but by his third and fourth issues it dropped to 4.5-6.0 percent. During the reign of Isaac II, the silver content fell once again to the order of 2.5-3.0 percent, and finally under Alexios III it was reduced down to 2.0-3.0 percent.²¹ With the decline in the silver content of the billon *trachy* began clipping of the older billon *trachea* with higher silver content, which in itself is a sign monetary distress. Hendy, Metcalf and Grierson have differed over the periodization of the clipping of the billon *trachy*, which clearly began with the earlier and better (with higher silver content) issues of the coin, gradually

¹⁹ *Stamenon* is a corruption of *histamenon*, which refers to the standard ("standing") coin of the eleventh century, which after the eleventh century continued to describe the billon coins of the same weight but different metal. Hendy, *Coinage and Money*, 20.

²⁰ Hendy, *Catalogue*, 4. 1, 44.

²¹ Hendy and J. A. Charles, "The Production Techniques, Silver Content and Circulation History of the Twelfth-Century Byzantine Trachy," *Archaeometry* 12. 1 (1970), 18-20.

proceeding to those with lower silver content.²² Grierson and Hendy convincingly ascribe the actual clipping to the reign of Alexios III. The interesting point here is that the already low silver content of the billon *trachy* steadily declined to the level almost of the copper denomination (*tetarteron*) to the degree that during the thirteenth century there were only trace elements of silver remaining in this denomination.²³ This phenomenon –that the billon *trachy* functionally replaced the copper *tetarteron* completely –probably accounts for both the ubiquity of the billon *trachy* and the relative rarity of copper coins from excavations, and conceivably from hoards, in the thirteenth century.²⁴

All three coins discussed above contain gold and/or silver, are concave in shape and hence easily recognizable as the higher denominations of the new system. They could be distinguished from each other by their color, inscriptions and iconography.²⁵ The lowest copper denominations, the *tetarteron* and its half, on the other hand, were

²² Metcalf, "Neatly Clipped Trachea and the Question of Byzantine Monetary Expedients in the Late Twelfth Century," *NCirc* 81 (1973), 370-371; Grierson, "The Date and Fineness of Byzantine 'neatly-clipped' Trachea," *NCirc* 83. 2 (1975), 58; Hendy, *Catalogue*, 4. 1, 59-60.

²³ Papadopoulou's table in "De l'unité à l'éclatement," vol. 3, Appendix C.

²⁴ Hendy, *Catalogue*, vol. 4.1, 52 has a handy chart showing a list of all the denominations issued by thirteenth-century polities in the Aegean basin and the Balkans. A glance at the contents of the hoards listed in Hendy, *Coinage and Money*, 325-404 (which covers not only Greece and Asia Minor but also Cyprus and the Balkans) accounts for the rarity of the *tetarteron* and its half in surviving hoards from the thirteenth century, in particular.

²⁵ Not, however, by their weight; all three denominations weigh approximately 4.3 grams. The *tetarteron* is about four, and its half, two grams.

flat coins, valued at $1/864^{\text{th}}$ and $1/1,728^{\text{th}}$ of the *hyperpyron* respectively.²⁶ The main mints in Constantinople and Thessalonike issued essentially the full denominational gamut, even though it seems from the surviving coins that Thessalonike specialized in minting copper *tetartera*.²⁷ Hendy assumes that during the twelfth century, definitely under Manuel I, one, or possibly two, unidentified mints in southern Greece, Corinth (and possibly also Thebes), issued copper coinage, judging from the enormous numbers of this denomination and its half found at the excavations in Corinth and Athens.²⁸

With respect to the purchasing power of these denominations, even though information is scarce and non-complementary, it may be helpful to provide these observations. Land, houses, slaves, salaries, luxury textiles were ordinarily valued in *hyperpyra*. On average, between the eleventh and the thirteenth century, one *modios* of good quality land (about 841.11m²) amounted to one *hyperpyron*.²⁹ The billon and the

²⁶ For variations in this group's relation to the higher denominations see, Papadopoulou, "De l'unité à l'éclatement," 102-103. As the silver and gold content of the higher denominations declined, the respective nominal value of the copper coins increased to $1/736^{\text{th}}$ from $1/1472^{\text{th}}$ of the *hyperpyron* during the reign of Alexios III.

²⁷ Hendy, *Catalogue*, vol. 4.1, 129-130.

²⁸ Hendy, *Catalogue*, vol. 4.1, 131. Since mint attributions of all the other denominations are known, only *tetartera* and their half are thought to have been issued at this (or these) unknown mint(s). There might have existed one other mint in the Balkans or Thrace. Morrisson thinks it was in Adrianople, Hendy argues for Philippopolis. See Grierson, *Byzantine Coins*, 225. This means four, or possibly, five mints functioned in the twelfth century. In the thirteenth and fourteenth centuries there possibly were as many as twelve mints, some of which, like the possible one in Philadelphia, were of a quite short duration. For example, a mint in Philadelphia functioned during Theodore Mankaphas's independent rule in the city in ca. 1188-89 and 1204-1205. There are two possible coin attributions to Mankaphas made by Hendy. No other coin issues of Mankaphas are known, yet Niketas Choniates writes that Mankaphas did issue silver coinage. Hendy, *Catalogue*, vol. 4.1., 133, 392-395.

²⁹ Schilbach, *Metrologie*, 74-81.

electrum *trachea* defined the values of items at fractions of the *hyperpyron*. One could purchase a measure (*thalassion metron*) of wine (10.25 liters) for about one billon *trachy*, for example.³⁰ There are no specific examples for what one could buy with the twelfth-century electrum *trachea* (*trikephalon*) but thanks to Tzetzes's account we know that one pound of bread cost one *tetarteron*, as did ten mackerels in the market in Constantinople in the early twelfth century.³¹ Thus, even though in very rough contours that fail to capture the variations across centuries and between locations, it is immediately clear that the most commonly used denominations in low-value transactions were the copper and the silver alloy coins, i.e. the billon *trachea* and the copper *tetartera*, while the *hyperpyron* and the electrum *trachea* were reserved for high-value transactions.

According to the extensive lists provided by Morrisson and Cheynet it is notable that the prices doubled in the fourteenth century and this steady but slow rise in the prices over the centuries that became evident in the fourteenth century seems to have occurred parallel to the continuous devaluations the Byzantine coins underwent between the eleventh century and the fourteenth century. In other words, the slow but steady decline in the valuable metal content of the coins likely accounts for a similarly slow but steady inflationary rise in the prices. In depth and comparative analysis can

³⁰ *Ibid.*, 112-113.

³¹ P. A. M. Leone, ed., *Tzetzes, Epistulae* (Leipzig, 1972), Epist. 57, 81-82.

potentially deepen our understanding of this phenomenon and the purchasing power of the different units of account in Byzantium.³²

*Table 1. 2. Byzantine Coins and their Values with Respect to the Hyperpyron, 1204-1304*³³

GOLD <i>Hyperpyron</i>	SILVER <i>Aspron trachy</i> <i>Trikephalon</i> (<i>Manuelatos</i>)	BILLON <i>Stamenon</i> <i>Aspron trachy</i>	COPPER <i>Tetarteron</i>
1	12	288	576

The *hyperpyron* retained its ca. 20 carat-level throughout the twelfth century.

Under the Angeloi the gold content was reduced slightly to 19.6 carats on average.³⁴

³² C. Morrisson and J. C. Cheynet, "Prices and Wages in the Byzantine World," in *EHB*, 821, 830, 834-835.

³³ Morrisson, "Byzantine Money: its Production and Circulation," in *EHB* 3, 925.

³⁴ The figures are not always reproducibly accurate and differences ensue from the methods used in calculating the metal content of the coins. For example, proton activation is not reliable if the copper content of the coin exceeds 30 percent, which is the case for billon *trachea* and *tetartera*. One such study is on billon *trachea* coins of Alexios III found in Thasos: H. Gropengiesser, "Byzantinische Münze aus dem Gebiet des Antiken Goldbergwerks bei Kinyra auf Thasos," *Schweizerische Numismatische Rundschau. Revue Suisse de Numismatique* 60 (1981), 73-81. The XRF (X-Ray Fluorescence) analysis, on the other hand, overestimates the silver content by 30-40 percent if most of the silver is on the surface of the coin. Chemical analysis is a reliable method but it is quite destructive. The laser ablation inductively coupled plasma mass spectrometry (LA-ICP-MS), is a reliable and effectively non-destructive method, recently adapted to ancient coin analyses: G. Sarah, B. Gratuze and J.N. Barrandon, "Application of Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICP-MS) for the Investigation of Ancient Silver Coins," *Journal of Analytical Atomic Spectrometry* 22 (2007), 1163-1167. In the LA-ICP-MS method the laser focuses on the metal and progressively gets deeper toward the middle. It allows researchers to trace the amounts of minerals, even the minor ones and the trace elements, that would go undetected with the traditional methods. It has been used successfully for Roman, Carolingian and Islamic coins: M. Ponting, J.A. Evans and V. Pashley, "Fingerprinting of Roman Mints Using Laserablation MC-ICP-MS Lead Isotope Analysis," *Archaeometry* 45.4 (2003), 591-597; G. Sarah, M. Bompaire, M. McCormick, A. Rovelli, C. Guernot, "Analyses élémentaires de monnaies de Charlemagne et Louis le Pieux du Cabinet de Médailles: L'Italie carolingienne et Venise," *RN* 164 (2008), especially, 363-364 for the usefulness of this method in application. Gondonneau and Guerra analyzed the metal content of 234 dinars from the seventh to the twelfth century using the same method: A. Gondonneau, M.F. Guerra, "The Circulation of

When the *hyperpyron* was reintroduced first by John III (1221-1254), it was set at 16 carats (67 percent).³⁵ John's contemporaries in Constantinople, Thessalonike and southern Greece issued no gold coinage; the highest denomination of the Latin Empire of Constantinople was the electrum *trachy*, which is essentially a silver coin with very low silver content.³⁶ Under Michael VIII the gold content of the *hyperpyron* was further

Precious Metals in the Arab Empire: the Case of the Near and the Middle East," *Archaeometry* 44.4 (2002), 573-599. I thank Prof. Cécile Morrisson for this reference. This method was applied recently to the two gold bullae of the Latin emperors of Constantinople and another gold bull of Emperor Michael VII (1071-1078), alongside four twelfth-century *hyperpyra*: Morrisson, M. Blet-Lemarquand, "Le Métal des chrysobulles (XI^e-XII^e siècle)," *RN* 164 (2008), 151-167. Otherwise, it remains to be applied to Byzantine coins (of all periods). For comprehensive lists of the metal content of Byzantine coins of the Komnenians and the Palaiologoi see Morrisson, C. Brenot, J.-N. Barrandon, J.-P. Callu, J. Poirier and R. Halleux, *L'or monnayé I. Purification et alterations de Rome à Byzance* (Paris, 1985), 154-170 with tables; Morrisson, Barrandon and Bendall, "Proton Activation and XRF Analysis: an Application to the Study of the Alloy of Nicaean and Palaeologan Hyperpyra Issues," in *Metallurgy in Numismatics* vol. 2 ed. W. A. Oddy (London, 1988), 23-39.

³⁵ R. Leonard underscores, however, that the 16 carat ratio was in line with the monetary standards of the time, as both in the Regno (Angevin rule in southern Italy and Sicily) and in the Kingdom of Jerusalem, gold coin was of 16 carats. This changed with Frederick II's minting of the *augustales* in ca. 1231 which raised the bar to a 20 carat level. See Leonard, "The Effects of the Fourth Crusade on European Gold Coinage," in *The Fourth Crusade: Event, Aftermath, and Perceptions* ed. T. Madden (Aldershot, 2008), 84-85.

³⁶ I know of no study that analyzes the metal content of the coinage of the Latin Empire after Hendy and Charles' and Metcalf's works from the 1970s. Metcalf and Charles' article was based on a then newly acquired set of billon *trachea* (thirteen in total) by the Fitzwilliam Museum which Hendy thought were "Bulgarian" (i.e. "loyal") and Latin imitations. The authors applied both X-Ray Spectrometry and chemical analysis on these coins. They found that both the Bulgarian and Latin imitations contained between 0.2-0.5 percent of silver. See Hendy and Charles, "The Production Techniques, Silver Content and Circulation History of the Twelfth-Century Byzantine Trachy," *Archaeometry* 12.1 (1970), 20-21. Metcalf and Gordus' neutron activation analysis (hence not good for coins with less than 5 percent silver content) noted that the Latin imitations contained between 0.3 and 1 percent silver content. See, Metcalf, "Silver and Tin in the Byzantine Trachy Coinages ca. 1160-1261," *Revue belge de numismatique* 123 (1977), 127-130. The latest research (of only Byzantine coins) uses chemical analysis and applies the XRF method: N. Th. Georgiades, "Ανάλυση της χημικής σύστασης Βυζαντινών νομισμάτων (1204-1453) με τη μέθοδο XRF," *Byzantiaka* 25 (2005-2006), 191-206. I would like to thank Dr. Julian Baker for this reference. On Morrisson and Blet-Lemarquand's 2008 analysis of Latin bullae, see n. 34 above.

reduced to about 15 carats (ca. 65 percent).³⁷ Significantly, it was Michael VIII himself who for the first time allowed the export of *hyperpyra* to the West after 1261.³⁸ The steady decline in the gold content of the *hyperpyra* must have reduced the tolerance for the *hyperpyron*'s instability at a time when Florence had already begun issuing a high standard gold coinage and which would be followed by Venice in the 1280s.³⁹ The reduction from about 60 percent gold content under Michael VIII to about 50 percent under John V (1341-1391) might account for why the latter finally stopped minting gold coins altogether.⁴⁰ Evidently, the Byzantines no longer had sufficient gold supply and the *hyperpyron* had completely lost credit as a dependable international medium of exchange, compared to its rivals.

All of the above developments need to be interpreted against the background of a larger shift from gold to silver in Byzantium that broke the integrity of the tri-metallic Komnenian system visibly after 1204. In the thirteenth century, in formerly Byzantine lands, coins were issued only in Bulgaria and by the Nicaean state in Asia Minor.⁴¹ The only denomination that was issued consistently by all of the polities in the Aegean basin

³⁷ Hendy, *Coinage and Money*, 247.

³⁸ Morrisson, "Byzantine Money: its Production and Circulation," *EHB* 3, 965. Possibly melted down once they reached the West. There are no records on Michael VIII issued coins in Italy that I was able to find. Of course, the exports were possibly not limited to this emperor's *hyperpyra* issues.

³⁹ Morrisson, et. al., *L'or monnayé I.*, 164-166.

⁴⁰ See Grierson's analysis of the metal content in his *Catalogue*, vol. 5. 1, 241-246.

⁴¹ Hendy, *Catalogue*, vol. 4. 1, 52.

and the Balkans was the billon *trachy* with its less than 6 percent, and consistently waning, silver content. When the French *denier tournois* was introduced with 1204 (local Frankish issues were minted only after the middle of the thirteenth century) via the French crusaders into the Peloponnese, it took second place between the electrum and billon *trachy* coins because it contained about 20 percent silver.⁴² The relative rarity of the electrum *trachy* finds from hoards and excavations in western Asia Minor and all of Greece combined helps us understand the introduction of French silver coinage into the region, specifically into southern Greece, first via imports from France during the first half of the thirteenth century, then via the commencement of local production in the second half of the thirteenth century, again in southern Greece. The new coins must have been addressing a need created by the decline in a stable silver alloy coin that could be used in daily transactions. If, as I believe, the French and later the Frankish *tournois* were filling a gap in the new monetary system of thirteenth-century southern Greece as a result of its higher silver content and relative stability, then we would expect to see evidence of the *tournois* in the Aegean basin as a whole. The reality is, however, that in the first half of the thirteenth century the French (not the Frankish—the

⁴² The latest analysis point out that the silver content varies between about 20 percent to about 30 percent. See D. Athanasoulis and J. Baker, "Medieval Clarentza. The Coins 1999-2004 with Additional Medieval Coin Finds from the *nomos* of Elis," NC 168 (2008), 216-217. The fourteenth-century Byzantine issues, the *basilikon* and the *stavraton* were both pure silver coins partially filling the need for a stable and reliable low- to medium-denomination currency. See Grierson, *Catalogue* vol. 5, 10-11, 28, 50 and 142 especially.

latter was produced after 1250⁴³) *tournois* does not seem to have penetrated western Asia Minor at all. But it did leave a visible trail in the archaeological record from the Peloponnese, the Aegean islands and southern Italy.⁴⁴ I will turn to this anomaly below and provide an explanation for it.

⁴³ A. Tzamalīs, "The First Period of the Frankish Tornesio. New Evidence from an Old Hoard," in *Nomismatika Xronika* 9 (1990), 101-129. The author thinks that the first *tournois* were issued under William II Villehardouin (1246-1278) and that their issue ended under Charles I following the Sicilian Vespers in 1282. Athanasoulis and Baker, "Medieval Clarentza," *NC* 168 (2008), 241-301.

⁴⁴ J. Baker, "Some Notes on the Monetary Life of the Dodecanese and its Microasiatic Peraia, ca. 1100-1400," *Obolos* 8 (2006), 363, 366.

CHAPTER 1

Distribution Patterns of Byzantine Coins in Italy (From the Eleventh through the Fourteenth Century) *

Analyzing the evidence from Italy may allow us to discern a pattern regarding the collective scale of the Byzantine coins found there. To date, I have been able to identify only thirty nine published references to finds of Byzantine coins from the twelfth and thirteenth centuries, all except nine from excavations. Of the total, the earliest coins are from the reign of Alexios I and the latest are *possibly* from the reign of Andronikos II (1282-1328). All of these Byzantine coins come from either the Veneto area or from Apulia, except for six coins in museums: five in the coastal site of Luni (100km south of Genoa) and a single *tetarteron* of Andronikos I (1183-1185)⁴⁵ in Breno (in Lombardy, 60km west of Trent and 80km north-west of Verona). Without exception all of the coins found in Italy are of lower denominations, either the billon *trachy* or the *tetarteron* and its half.

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⁴⁵ Andronikos I's issues are normally rare given the short span of his reign, so it is somewhat surprising to find a record of it in the Museum of Breno.

Table 1. 3. Byzantine Coin Finds from Italy, 12th -14th Century⁴⁶

Issuer	Find Site	Denomination	Mints	Amount
Alexios I (1081-1118)	Venice, Altino	Stamenon	Constantinople	1
Alexios I	Venice, Torcello	Tetarteron	Constantinople	1
Alexios I	Brindisi	Tetarteron	Constantinople	1
Alexios I	Cherasco	Tetarteron	Constantinople	2
Alexios I or Manuel I	Castel Trosino, Marche	Hyperpyron	Unidentified	1
John II (1183-1143)	Venice	Tetarteron	Thessalonike	1
John II	Otranto	Tetarteron	Thessalonike	1
Manuel I (1143-1180)	Florence	Hyperpyron	Constantinople	1
Manuel I	Otranto	Tetarteron	Thessalonike	1
Manuel I	Venice, Torcello	Half Tetarteron	Constantinople	1
Manuel I	Venice	Stamenon	Unidentified	1
Manuel I	Bari	Half Tetarteron	Constantinople	1
Manuel I	Cherasco	Stamenon	Thessalonike	1

⁴⁶**Aquileia:** Arslan, *Repertorio*, no. 2225; **Breno:** Arslan, *Repertorio*, no.3543; **Castel Trosino:** B. Callegher, "Presenza di monete bizantine nelle Marche," *Atti e Memorie* 102 (1997), 76; **Cherasco:** B. Callegher, *Monete bizantine, ostrogote e longobarde della Collezione Adriani nel Museo Civico di Cherasco* (Cherasco, 2008), 86-91; **Egnazia:** Arslan, *Repertorio*, no.5195; Otranto: Arslan, *Repertorio*, no.5300; Travaini, *La monetazione nell'Italia normanna* (Rome, 1995), 381; **Florence** (Archaeological Museum), W. Seipel, ed., *Die Magie des Goldes. Antike Schätze aus Italien* (Milan, 1996), no. 207, pp. 140-142; **Luni:** Arslan, *Repertorio*, no. 3382; **Venice:** L. Fozzati, *L. Ca' Vedramin Calergi. Archeologia urbana lungo il Canal Grande di Venezia* (Venice, 2005), 158, 161, n. 4; **Venice, Torcello:** Arslan, *Repertorio*, no.9350; Travaini, *La monetazione nell'Italia normanna* (Rome, 1995), 381; S. Tabaczynski, *Torcello. Scavi 1961-1962* (Rome, 1972), 271-286; **Venice, Vignovo:** M. Asolati, C. Crisaffulli, *Ritrovamenti monetali di età Romana nel Veneto* vol. 6.3 (Padova, 1993), 164.

Table 1. 3. Byzantine Coin Finds from Italy, 12th -14th Century (Continued)

Manuel I	Cherasco	Stamenon	Constantinople	2
Manuel I ?	Luni	Tetarteron?	Unidentified	3
Andronikos I (1183-1185)	Breno	Tetarteron	Unidentified	1
Andronikos I	Cherasco	Tetarteron	Constantinople	1
Isaac II (1185–1195, 1203–1204)	Aquileia	Stamenon	Constantinople	1
Isaac II	Otranto	Stamenon?	Constantinople	1
Isaac II ?	Venice, Vigonovo	Stamenon	Unidentified	1
Isaac Komenos of Cyprus (1184- 1191)	Cherasco	Stamenon	Nicosia	1
Alexios III (1195- 1203)	Venice	Stamenon	Unidentified	1
Alexios III	Venice, Vigonovo	Stamenon	Constantinople	2
Alexios III	Cherasco	Stamenon	Constantinople	2
Latin Empire of Thessalonike (1204-1224)	Otranto	Tetarteron	Thessalonike	1
Theodore I of Epiros (1215-1230)	Otranto	Tetarteron	Thessalonike	1
Manuel I Komnenos Doukas of Epiros (1230- 1237)	Otranto	Stamenon	Thessalonike	1
John III Vatatzes (1221-1254)	Luni	Tetarteron	Nicaea/Magnesia	1
Loyal imitations	Cherasco	Stamenon	Unidentified	2

Table 1. 3. *Byzantine Coin Finds from Italy, 12th -14th Century (Continued)*

"Thirteenth Century"	Egnazia	Tetarteron	Unidentified	1
Thirteenth Century Palaiologan?	Luni	Half Tetarteron	Unidentified	1
Andronikos II and Michael IX? (1294-1320)	Egnazia	Tetarteron	Constantinople	1
Andronikos II and Michael IX (1294-1320)	Cherasco	Basilikon	Constantinople	1

Otranto in Apulia was under Byzantine rule until 1068 by the Normans after about a decade of resistance. The Otranto excavations have produced 140 Byzantine coins from the reign of Justinian until the fourteenth century, the highest number among all the coins from the site.⁴⁷ Seventy four of these coins are eleventh-century copper *folles* including two of Michael VII (1071-1078) and three Thessalonike issues of pre-reform *folles* (1081-1092). Concerning the coins from the twelfth and thirteenth centuries, apart from the local issues of the Normans, the Hohenstaufen, Charles I of Anjou (which altogether amount to thirty two coins) and unidentified copper Byzantine (10) and "medieval" (12) coins, all of the remaining fourteen coins are either Byzantine issues (9) or have a southern Greece connection (5).

⁴⁷ There are no coins dated to after the fourteenth century, even though coins from the modern period are recorded. A. Travaglini, "Le monete," in eds. F. D'Andria and D. Whitehouse, *Excavations at Otranto II* (Lecce, 1992), 241-278.

As more numismatic evidence discussed below will show, Otranto's link with southern Greece continued until the middle of the fourteenth century. That contact clearly took on a different form after 1068; the city was no longer under Byzantine but Norman rule. Nevertheless, numismatic evidence reveals that there is a seamless continuity between the eleventh and the twelfth centuries. The Komnenian coins are well represented with three *folles* of Alexios I, a single *tetarteron* of John II and Manuel I each, all of which were minted in Thessalonike. The last Byzantine contribution is a billon *trachy* of Isaac II issued in Constantinople. The remaining issues from the twelfth century are nine copper *follari* of Roger II and William II minted in Bari, Messina and Palermo, alongside two half *denarii* of Henry IV issued in Brindisi following the German conquest in 1194. Apart from the Byzantine issues of John II, Manuel I and Isaac II, the only other twelfth-century imports are two silver *denari*, one from the County of Anjou⁴⁸ and the other from Champagne-Provins.⁴⁹

Fifteen *denarii*, Brindisi or Messina issues of Frederick II (1212-1250), Manfred (King of Sicily, 1258-1266) and Charles I (1266-1285), extend over the thirteenth century. The remaining thirteenth-century coins are from Greece, especially the Peloponnese, but not limited to it as there are two billon *trachea* minted in Thessalonike under Epirote

⁴⁸ The inscription reads "Fulc[o Comes]" but does not clarify which Fulco issued the coin. *Excavations at Otranto II*, 263. n. 257.

⁴⁹ "TEBALT COMES" *ibid.*, n. 258.

rulers Theodore I Komnenos Doukas (1224-1230) and Manuel I Komnenos Doukas (1230-1237). There is also a Latin imitative billon *trachy*, again minted in Thessalonike.⁵⁰ Apart from the single silver *denier*, possibly from the thirteenth century, minted in the County of Melgueil (modern Maugio in Languedoc-Roussillon, France), the issues of the Principality of Achaia and Athens have the highest representation of “imported” coins of the thirteenth century.⁵¹ The latter are represented by five *deniers tournois* issued in Thebes or Clarentza with a date range from 1250 to 1350. Clearly, then, in the twelfth and thirteenth centuries, the extent of the communications between Otranto, which was no longer Byzantine, and Greece were much lower than the eleventh-century level insofar as we can judge from the aggregate numbers of coins. Other factors might have played a role in this such as regalian policy, however, the Norman kings, especially Roger II (Duke of Apulia 1127-1130), have exerted a policy that did not ban or restrict foreign coins.⁵² Thus, despite the fact that the city was no longer under Byzantine rule in the twelfth century, the contact itself continued without a break into the thirteenth and fourteenth centuries, despite the political changes southern Italy and southern Greece underwent. It is no doubt worthy of note that in the twelfth century Byzantine coins constitute the single largest number (three) of “foreign” issues from Otranto and they

⁵⁰ *Ibid.*, nos. 216, 217, 218.

⁵¹ *Ibid.*, nos. 260-264.

⁵² *MEC*, 76-79.

continue to do so in the thirteenth century when mainland Greece was under new Greek and French rulers. Otranto's links with Greece, then, seem to have continued in an uninterrupted manner through the thirteenth century, for during that century over a fourth of all the excavated coins are connected to Greece (8/23). Surely, geographical proximity must have been a significant factor in this outcome.

Most significantly, however, all of the Byzantine coins are from archaeological contexts where they occur together with contemporary Byzantine fine, glazed pottery. In other words, the Komnenian coins are from the same late eleventh- and twelfth-century layers that contained the corresponding Byzantine fine pottery—proof that they are not intrusions. The same is true for the layers from which the thirteenth-century coins of Epiros and Achaia come.⁵³ Concerning the coin evidence from Otranto this much can be said: that the coins and the pottery demonstrate the strong political and/or economic link between Byzantium and this city especially for the period up to the end of the eleventh century when the city was under Byzantine control.⁵⁴ The excavation on the small island of Kephalos in southern Epiros, in return, produced a tenth-eleventh-

⁵³ "Byzantine sgraffitos seem to have arrived in significant quantities, especially between c. 1150 and c. 1250" in *ibid.*, 162. Also significant is the observation by Patterson and Whitehouse that "by the end of Phase VI [thirteenth century], only one possible glazed import was found. This suggests an almost total dependence on local production." H. Patterson and D. Whitehouse, "The Medieval Domestic Pottery," in *ibid.*, 186.

⁵⁴ "If we have identified the 'Byzantine' pottery from Otranto correctly, it represents the largest group of medieval imports from Greece and the Aegean so far discovered in southern Italy and perhaps the most varied group from anywhere in the Italian peninsula." *Ibid.*, 162.

century Otranto I amphora, confirming that connection across the Adriatic from the other end.⁵⁵ The Byzantine presence up to the 1070s is represented, as is true for most of former Byzantine holdings in southern Italy, overwhelmingly by the *folles*. The Byzantine fine pottery of the twelfth century in Otranto, second only to the Islamic fine ware imports in that century, likewise come from same layers as the twelfth-century Byzantine coins.

In the thirteenth century, Otranto's links with Achaia, as opposed to Epiros, grew stronger. The two coins from the Despotate of Epiros, one belonging to Theodore I Komnenos Doukas and the other to his successor Manuel I Komnenos Doukas, suggest some kind of a connection between Otranto and Epiros. It is nevertheless clear that the most significant contact Otranto had in Greece in the thirteenth and fourteenth centuries was with Achaia, for, among the imported coins, the highest number comes from Achaia. Otranto produced five silver *deniers* issued between 1246-1333 (deniers of William II Villehardouin, Guy I and II de la Roche, Mahaut de Hainaut and John of Gravina), as opposed to one possible silver *denier* from southern France.⁵⁶

Overall, the Byzantine coins and pottery exports in the twelfth century are quite significant as there is no other noticeable numismatic presence of another foreign polity

⁵⁵ M. Veikou, *Byzantine Epirus. A Topography of Transformation. Settlements of the Seventh-Twelfth Centuries in Southern Epirus and Aetoloacarnania, Greece* (Leiden, 2012), 220.

⁵⁶ Patterson and Whitehouse, "The Medieval Domestic Pottery," 261-265.

then. The same holds true for the thirteenth and fourteenth centuries when contacts with the Frankish principality of Achaia and to a lessening but still visible degree with the Despotate of Epiros (geographically closer to Otranto than Achaia) are evident. It is noteworthy that all of these coins are of lower denominations, and together with the presence of Byzantine and Corinthian pottery, there seem to have been commercial links between Otranto and Frankish Achaia that continued to exist at least until roughly the middle of the fourteenth century, which anticipated the establishment of Angevin rule in southern Italy and Sicily (in 1267), when the area was *not yet* under Angevin, but German rule.⁵⁷ Charles I of Anjou, well known for his ambitions,⁵⁸ may have piggy backed on the already-established connection between Achaia and southern Italy to expand his rule into Greece when he signed the treaty of Viterbo in 1267 with William II of Achaia.⁵⁹ The links between Achaia and southern Italy continued in the twelfth and became even stronger in the thirteenth and fourteenth centuries. The strength of these links anticipates the Angevin attempt and eventual success at acquiring Achaia officially via the Treaty of Viterbo in 1267.

⁵⁷ Martin, *La Pouille du VI^e au XII^e siècle* (Paris, 1993), 467-469; V. Von Falkenhausen, "La circolazione monetaria nell'Italia meridionale e nella Sicilia in epoca normanna secondo la documentazione di archivio," *Bolletino di Numismatica* 6-7 (1986), 70-73. The latter refers to the documents from the 1150s, mentioning French coins from Provence—the "provesini."

⁵⁸ L. Boehm, "De Karlingis Imperator Karolus, princeps et monarcha totius Europae," *Historisches Jahrbuch* 88 (1968), 1-35.

⁵⁹ J. Longnon, "Le Traité de Viterbe entre Charles I^{er} d'Anjou et Guillaume de Villehardouin, Prince de Morée (24 Mai 1267)," in *Studi in Onore di Riccardo Filangieri* vol. 1 (Naples, 1959), 307-314.

In the excavated material from Bari Castle, another site in Apulia, the Byzantine *folles* are followed by only one issue of a half *tetarteron* minted in Thessalonike by Manuel I while the rest are local issues of the Norman kings.⁶⁰ Excavated coins in S. Pietro degli Schiavoni in Brindisi have a similar ratio and composition, consisting of Byzantine *folles*, twelfth-century Komnenian *tetartera*, and Norman issues. The only Komnenian coin in this particular excavation is a pre-reform *folles* of Alexios I.⁶¹ The consistent and overwhelming presence of Byzantine *folles*, starting with Type A2 (issued between 976-1035),⁶² in southern Italy has been studied scrupulously by Callegher and Travaini. In his detailed study of the *folles* finds Callegher argues that the Byzantine *folles* was the unit of exchange and backbone of the monetary system in southern Italy.⁶³ According to Travaini, the “numerous” recorded instances of tenth-century *folles* in Campania may be accounted for by the military activities of the Byzantine fleet in the region at that time. However, as Travaini herself argues, the examples are not limited to that century or to Campania.⁶⁴ Martin notes 209 *folles* listed in the Museum of Taranto,

⁶⁰ L. Travaini, *La Monetazione nell' Italia Normanna* (Rome, 1995), 377.

⁶¹ *Ibid.*, 378.

⁶² Callegher, “Presenza di ‘Folles Anonimi,” 293-312.

⁶³ Callegher, “Monete medioevali dei secoli XI-XIII in Firuli,” 339-362.

⁶⁴ Travaini, *Monete e storia*, 140.

alongside two *miliaresia* (silver coins that represent 1/12th of gold *nomisma*) of Basil I.⁶⁵ Byzantine *folles* issued before the 1067 debasement were hoarded after that date.⁶⁶ Furthermore, the post-eleventh-century continuity of Byzantine coin iconography in Norman Italy's local coinage is well-known.⁶⁷ In the south, before Roger II (1127-1154), the *tari* (standard gold coin) of Amalfi dominated the plain of Campania, the *tari* of Salerno the hinterland, while the Byzantine *folles* and its Italian copper equivalent were mainly circulating in Apulia. So, Byzantine copper coins were still a part of the monetary system there until the twelfth century. In 1140 Roger banned copper coinage and created the silver *ducato* which, together with the issue of William I, the *denaro* of Pavia, and of Angers, constituted the primary monies in circulation in twelfth-century southern Italy.⁶⁸

The second extensive set of reforms concerning the monetary system of the south came under Henry VI (1194-1197). In 1194 he abolished the copper coinage for the second time after Roger II's first unsuccessful attempt which indicates the continued demand for copper coins for which Byzantium was a source. Henry VI also banned the

⁶⁵ Martin, "Economia naturale ed economia monetaria nell'Italia meridionale longobarda e bizantina (secoli VI-XI)" in R. Romano and U. Tucci, eds., *Storia d'Italia Annali 6. Economia naturale, economia monetaria* (Torino, 1983), 193.

⁶⁶ Callegher, "Monete medioevali dei secoli XI-XIII in Firuli," 342.

⁶⁷ MEC, 77-81, and *passim*.

⁶⁸ J.-M. Martin, "Monete d'argento nell'Italia meridionale del secolo XII secondo i documenti archivio," *Bolletino di Numismatica* 6-7 (1986), 89-90.

importation of foreign gold into his possessions in Italy. Finally, Frederick II's (1220-1250) reform culminating in the issue of the gold *augustales* after 1221 was much more successfully and effectively implemented than those of his predecessors, according to the numismatists who study his reforms in detail.⁶⁹ In short, starting from the end of the eleventh century, the Byzantine coins were no longer a part of the monetary system in Apulia. The presence of the Byzantine coins in Apulia, therefore, is a reliable indicator of the existing links (economic and/or political) with the polities in Greece. Overall, in the south, the coin finds (and possibly the coin emissions) are not numerous before roughly the first half of the thirteenth century when the overall number of coins pick up and reaches the levels attained in the north.⁷⁰ In terms of the post-eleventh-century presence of the Byzantine coins in southern Italy, however, it is clear that Apulia stands out among other south Italian regions.⁷¹ In the twelfth century the strongest contacts between Greece and southern Italy were concentrated in Apulia and Epiros.⁷² In the thirteenth and fourteenth centuries the contact between Greece and southern Italy was

⁶⁹ Travaini, "Federico II mutator monetae: continuità e innovazione nella politica monetaria (1220-1250)," in eds. A. Esch and N. Kamp, *Friedrich II. Tagung des deutschen historischen Instituts in Rom im Gedenkjahr 1994* (Tübingen, 1996), 339-362.

⁷⁰ Travaini, "Produzione e distribuzione dei denari svevi e angioini nel Regno di Sicilia all'luce dei rinvenimenti," in N. Christie, ed., *Settlement and Economy in Italy 1500 BC- AD 1500. Papers of the Fifth Conference of Italian Archaeology* (Oxford, 1995), 610.

⁷¹ Martin, *La Pouille*, 453.

⁷² Although Apulia's distance is about three times that from the Peloponnese and southern Greece. This raises the question whether the coins were coming directly from Achaia or indirectly from Epiros, the answer to which awaits future research.

strongest in the south, in Achaia, and this link anticipated the establishment of Angevin rule in Achaia in 1267, shortly after the Angevins first established their rule in southern Italy and Sicily.

A total of thirty-nine recorded instances of single coin finds from all of Italy may be small, but set in an excavation like the one conducted in Otranto where there are no other identifiable “foreign” coins –other than the six Byzantine issues—in the twelfth century, it is worthy of note. What is also significant in Otranto is that the Byzantine coins (Constantinopolitan, Thessalonican, Epirote and Magnesian issues) end with the thirteenth-century layers, even as the Frankish coins from southern Greece continue into the fourteenth. Clearly, in the thirteenth century, mainland Greece (especially Epiros) and Otranto remained linked, although no other discernible connection with another polity in the Aegean basin such as the Nicaean state can be seen in that site. An even stronger link persisted with Achaia into the fourteenth century, even as the specifically Byzantine successor states and their areas ceased to supply coins in this area. This strong link between southern Italy and Greece is easily traced via the Frankish *denier tournois* first issued in Achaia after the second half of the thirteenth century.

There are references to eleven other sites in Apulia and southern Italy that produced Frankish *deniers tournois* found at excavations in addition to Otranto: Brindisi,

Capaccio Vecchia⁷³ (near Salerno in Campania), Crotone (Calabria), Gerace (Calabria), Monopoli (near Bari), Paestum (near Salerno), Salento, Salerno, Satriano and Tropea (both in Calabria) and Velia (south of Salerno). Unlike the Byzantine coins from southern Italy, the *deniers tournois* are not limited to Apulia but extend to Campania and Calabria in addition to Apulia, comprising roughly of the holdings of the Angevin Kingdom in southern Italy and Sicily (i.e. the Regno). The highest number of the *tournois* comes from Capaccio Vecchia with seven specimens. However, as Travaini notes, the *denier tournois* were quite successful in southern Italy probably because the local billon *denari* was “nearly worthless” and consequently they seem to have addressed a need in the area for smaller denominations.⁷⁴ Even though they were banned from the Regno in 1280 they remained in circulation, according to Travaini, until the 1470s.⁷⁵ Interestingly, there are occasional references to single finds of *tournois* from central and northern Italy as well but they seem too isolated to be of any economic significance. The solitary *gros tournois* from St. Peter in Rome for example, seems more likely to reflect the cultural connection of pilgrimage than to stem from commercial

⁷³ L. Travaini, “Le monete di Capaccio Vecchia: campagne di scavo 1974, 1975, 1976, 1977, 1978,” in A. Buko, R. D’Andria et. al. eds., *Caputaquis Medievale II* (Naples, 1984), 357-374.

⁷⁴ Travaini, “Deniers Tournois in South Italy,” 428-429. The *denier tournois* possibly played a similar role in Greece.

⁷⁵ *Ibid.*, 422.

contacts.⁷⁶ Judging by these finds it is reasonable to argue for a continuous link between southern Italy and southern Greece in the twelfth and the thirteenth centuries that lasted through the fourteenth and possibly the fifteenth centuries.⁷⁷ The size of this link before the treaty of Viterbo of 1267 and/or before the Frankish kings began to issue their own coins, is not clear. However, once Clarentza, Thebes and Corinth became active producers of Frankish *tournois* the flow of these Frankish coins toward southern Italy becomes conspicuous. More specifically and interestingly, it is noticeable that in the thirteenth century, the communications between southern Italy and Byzantium's successors seem to have been limited to mainly southern Greece and that—judging from the absence of coins of similar denominations in Asia Minor—they largely excluded links with the Greek state in Asia Minor, notwithstanding signs of contact between the state of Epiros and the Latin Empire.⁷⁸

A quick look at the hoard evidence from southern Italy confirms the above conclusions based on single finds. Grierson and Travaini note the peculiarity that the *deniers tournois* of Frankish Greece are absent from Sicily and Sardinia, although they

⁷⁶ *Ibid.*, 425, n. 20. For example, a gros tournois of Philip of Taranto (1306-1311) minted in Lepanto was found in Rome: ed. C. Serafini, *Esplorazioni sotto la confessione di San Pietro in Vaticano* (Vatican City, 1951), 235.

⁷⁷ Baker, "Three Fourteenth-Century Coin Hoards from Apulia Containing Gigliati and Greek Deniers Tournois," *RIN* 102 (2001), 219-280.

⁷⁸ See above 38-42, 47 and below 55.

are present in south Italian mainland, where they are not limited to Apulia.⁷⁹ In other words, the *deniers tournois* were circulating roughly everywhere in the Regno, except for Sardinia and Sicily. So far, there are only two possible references to post-eleventh-century Byzantine coins on Sicilian soil, one of which is from a shipwreck. The first concerns a twelfth-century hoard from Piazza Armerina in Enna (middle of Sicily), deposited at the end of the twelfth century that contained an unidentified Byzantine gold coin among a total of eighty other gold *taris* and a single *tari* fragment (*spezzato*) of twelfth-century Norman kings of Sicily.⁸⁰ The second comes from an inventory sent to Charles I of items recovered from the ship of Louis IX which sunk in 1270 off the coast of Trapani (a coastal town on the westernmost promontory in Sicily).⁸¹ The inventory contains references to three Byzantine *hyperpyra* ("perperos III") alongside other gold and silver western coins such as the *gros* and *petit tournois* in much larger quantities--given in weight--twenty one *augustales*, 137 *florins* and twenty three Castilian *marabotins*, among others.⁸² We do not know from where exactly the ship sailed. In any case, the very nature of these two isolated references and the absence of Frankish *denier tournois* from Sicily allows us to safely infer that its contact with Byzantium did not

⁷⁹ Travaini, "Deniers Tournois in South Italy," in ed. N.J. Mayhew, *The Gros Tournois. Proceedings of the Fourteenth Oxford Symposium on Coinage and Monetary History* (Oxford, 1997), 421-451 contains a list of places in South Italy where the *denier tournois* were found; MEC., 406.

⁸⁰ MEC, n.66, 420.

⁸¹ L. Carolus-Barré, "Objets précieux et monnaies retrouvés dans le port de Trapani, en 1270, dont 21 écus d'or de Saint Louis," RN⁶ 28 (1976), 114-118.

⁸² MEC, n.108, 423. L. Carolus-Barré, "Objets précieux et monnaies," 116-117.

extend beyond the last quarter of the eleventh century. In this regard, Sicily's evidence resembles the evidence from eastern Turkey.

Most of the *denier tournois* hoards of Frankish Greece in southern Italy, on the other hand, may have been deposited in the fourteenth century with only one hoard (Melendugno, Lecce) dating from the fifteenth century with certainty. The Naples hoard had 2,494 *denier tournois* from Frankish Greece, deposited together with specimens from south Italian mints whose numbers are not known.⁸³ The Taranto Museum hosts 652 specimens of Frankish *denier tournois*. Presumably they belong to a single hoard and no other coins are known to have been deposited with the *denier tournois*.⁸⁴ Likewise, the San Vito dei Normanni (Brindisi) hoard only contained 40 issues of the same coin as part of a single hoard.⁸⁵ The list of hoards includes an unspecified number of Frankish *tournois* from the Melendugno (Apulia) hoard where they are deposited with a group of at least fifteen, fifteenth-century Italian issues.⁸⁶ The remaining Frankish *denier tournois* hoards from south Italy, except for the Filignano Hoard, run smaller, including less than 10 specimens, such as the Vibo Valentia I (Calabria) hoard (with a single *denier tournois* among twenty two other south Italian issues), the Policoro (Matera, in Basilicata) hoard

⁸³ *Ibid.*, n. 54, 419.

⁸⁴ *Ibid.*, n.105, 423.

⁸⁵ *Ibid.*, n. 82, 421.

⁸⁶ *Ibid.*, n. 39, 418.

of eight *denier tournois* alone.⁸⁷ Later, during the 1998 excavations in Filignano (about 80km north east of Naples), another hoard containing *denier tournois* issues was discovered. The Filignano Hoard contained, among seventeen other silver coin issues, twenty nine *deniers tournois*; thirteen of which were issued under Charles I in the Clarentza mint in western Achaia.⁸⁸

The recently published hoard from the Apulian site Muro Leccese, reported twenty Frankish *deniers* among a much larger number of local coins; the latest issues of other coins in the hoard date from the fifteenth century.⁸⁹ This evidence makes it easy to see why Baker argues, on the basis of the cumulative numismatic evidence, that Apulia was part of the same monetary zone as southern Greece from the late thirteenth century on. This was especially true under Angevin rule, with Sulmona, Tocco, Campobasso and San Severo –all in Apulia—minted coins of the same denomination (*denier tournois*) in the fourteenth, and possibly, the fifteenth centuries.⁹⁰ In view of the political and economic ties established between all of Angevin Italy (not just Apulia) and southern

⁸⁷ *Ibid.*, n.110, 424; n. 69, 420.

⁸⁸ Baker and P. Calabria “Filignano (IS): Le monete Tardo Medievali,” *RIN* 105 (2004), 268-270.

⁸⁹ The rest of the Muro Leccese hoard contains 189 *gigliati* issues of Robert of Anjou (1309-43) minted in Naples, one *gigliato* from a provincial mint and three *pieerali* of Federico IV (1355-1377) from Messina, as well as issues of Martino I (1402-9) and Alfonso Magnanimo (1416-58). The *denier tournois* issued in Campobasso was instrumental in the dating of the hoard to mid fifteenth century. See, L. Travaini, “Introduction,” in G. L. Mangieri, *Tornesi, gigliati e pirreali in un tesoretto rinvenuto a Muro Leccese* (Spoleto, 2010), vii-viii.

⁹⁰ Baker, “Repertorio,” in G. L. Mangieri, *Tornesi, gigliati e pirreali*, 15-17.

Greece, particularly with the Treaty of Viterbo in 1267, and the additional numismatic (and ceramic, see Part 2) evidence I have been able to adduce, I can only concur. From the perspective of southern Greece, this means that, based on the coin evidence, this area was politically and economically connected primarily with southern Italy in the thirteenth and the fourteenth centuries. After 1204 its ties with the rest of the Aegean polities became increasingly secondary. The strength of Angevin Italy's connection with southern Greece, and *vice versa*, can be seen from the excavations in southern Italy as well as the hoard evidence, in addition, from the fact that the Angevin mints in Italy were issuing *deniers tournois*.

Unlike the twelfth- and thirteenth-century Byzantine issues, which are limited to Apulia, mid-to-late-thirteenth-century Frankish issues in southern Italy excluding Sicily were largely concentrated in but not limited to Apulia. Frankish rulers in Greece did not begin to issue coins in their name before the middle of the thirteenth century;⁹¹ most of the hoards containing *deniers tournois*, were deposited in the late thirteenth or the fourteenth century. All of the hoards mentioned above except the Melendugno and the Vibo Valentia I Hoard contain solely *denier tournois*, while the Melendugno and Muro Leccese hoards share a fifteenth-century *post quem* date. The Vibo I Valentia Hoard was deposited sometime in the late thirteenth or the early fourteenth century, for the

⁹¹ Baker and M. Ponting, "The Early Period of Minting of Deniers Tournois in the Principality of Achaia (to 1289), and their Relation to the Issues of the Duchy of Athens," *NC* 161 (2001), 207-254.

remaining deposited coins are issues of Manfred (King of Sicily, 1258-1266) and Charles I (1266-1285). It appears that the *denier tournois* slowly fades away in southern Italy in the second half of the fourteenth century when trade with North Africa and Syria became the Regno's immediate commercial focus, and although it is difficult to pinpoint a certain date for the end of the use of Frankish *tournois* in southern Italy because of the difficulties in dating their imitations, Travaini thinks that mid-fourteenth century cannot be too far off the mark.⁹² My main conclusion from this evidence is that southern Greece, after 1204 but especially after 1267, was deeply involved, both politically and economically, with the Angevin Kingdom.

The above evaluation shows the significance of the presence of Byzantine coinage in southern Italy and describes its context. For southern Italy overall, then, based on the information available to me, the latest Byzantine coins belong to the first half of the fourteenth century. The same observation can be made for Byzantine coin finds hailing from the north. In north Italy, before the twelfth century, Byzantium's coinage was not nearly as widely circulated as it was in the south, but it was imitated in the twelfth century. For example, Saccocci argues that the Venetian copper *quartarolo* was likely directly copied after the Byzantine *tetarteron* and survived it as the trusted small denomination in the Veneto region after the late eleventh century, possibly as part

⁹² Travaini, "I denari "Tornesi" nella circolazione monetaria dell'Italia meridionale tra XIIIe XVe secolo" in R. Martini, N. Vismara, eds., *Glaux. Collana di Studi e Ricerche di Numismatica* (Milan, 1991), vol. 3, 715.

of Enrico Dandolo's reforms.⁹³ As such the *tetarteron* eventually inspired the copper *quartorolo* of Venice whose monetary system was to dominate all of Italy.

In the north of Italy, in the twelfth and thirteenth centuries there was a century-long competition between the coinage of Verona and Venice, with the former controlling a larger area in north-eastern Italy initially until the 1190s when the Veronese coinage was pushed back to Bavaria, the Tirol, Carinthia, and Croatia while the Venetian *grosso* as well as the *piccolo* expanded to areas north and south of Venice's borders. Venice's dominance in the numismatic circulation in and outside of Italy as a first-class economic power became conspicuous in the fourteenth century, so that by the middle of the fifteenth century the *Serenissima* was in control of the entire interior circulation in Italy even as it held the lion's share from international trade with the East.⁹⁴ All in all, even though very small, seen together with the equally sparse but comparable evidence from both the south and north of Italy, the thirty-nine twelfth-and thirteenth-century-Byzantine coins present an overall timeline for the change in the

⁹³ A. Saccocci, "Il Quartorolo," in ed. Saccocci, *Inspetto Nummo* (Padova, 2001), 153-158.

⁹⁴ Saccocci, "Rinvenimenti monetali di epoca medioevale nelle Venezia" in *idem.*, *Contributi di storia monetaria delle regioni adriatiche settentrionali (Secoli X-XV)* (Padova, 2004), 197-207; *idem.*, "Le monete negli scavi archeologici medievali delle Venezia," in ed. B. Maria Scarfi, *Studi di archaeologia della X regio* (Rome, 1994), 527-535; *idem.*, "Circolazione locale ed esportazione monete di area veneta" in *Circulation monétaire régionale et supra-régionale; Actes du troisième colloque international du Groupe Suisse pour l'étude des trouvailles monétaire* (Bern, 2002), 89. Same argument and information in "Moneta e circolazione monetaria nei domini di Ezzelino," in eds. C. Bertelli and G. Marcadella, *Ezzelini. Signori della Marca nel cuore dell'impero di Federico II* (Milan, 2001), 43-47. For an earlier but interesting evaluation of Venice's growth see L. B. Robbert, "The Reorganization of the Venetian Coinage by Doge Enrico Dandolo," *Speculum* 49. 1 (1974), 48-60.

nature of a link indicated by the end of Byzantine coins by the early fourteenth century. The latest single issues that I have been able to trace in all of Italy are the two coins from the joint rule of Andronikos II and Michael IX, a *basilikon* (issued between 1304-1320)⁹⁵ from the Cherasco Museum in the north-west, and a copper *tetarteron* from Egnazia, Apulia (issued between 1294-1320). The nature of the link represented by the remaining thirty-seven coins from the twelfth (27) and thirteenth centuries (10), however, emerges more clearly when other types of evidence—the fine ceramic wares (which we will discuss in Part 2)—are considered.

Most of the remaining single coin finds of north Italian provenance are indeed overwhelmingly from Venice. Among them a most recently excavated fifteenth-century building on the Canal, Ca' Vendramin Calergi, produced a *tetarteron* of John II (1118-1143).⁹⁶ There are two other references to billon *trachea* of John II and Alexios III (1195-1203) from Venice in the same work.⁹⁷ The excavations in the Quarto d'Altino produced a half *tetarteron* of Alexios I,⁹⁸ while in Vigonovo, Chioggia, three billon *trachea* were found during the building of the Church of S. Maria del Capitello di Tombelle in 1946 of which one was issued under Isaac II (1185-1195, 1203-1204) and the other two under

⁹⁵ Michael IX was depicted as successor on Andronikos II's coins between 1294 and 1320. The *basilikon* was issued for the first time in 1304. Grierson, *Catalogue*, 5. 1, 126, 129ff.

⁹⁶ Fozzati, *Ca' Vedramin Calergi. Archeologia urbana lungo il Canal Grande di Venezia* (Venice, 2005), 158.

⁹⁷ Not yet able to access the references.

⁹⁸ From Ca' Bernardi-le Crete, Lungo lo Scolo Carmasson. In Asolati and Crisaffulli, *Ritrovamenti monetali di età romana nel Veneto*, 6.1, 48/8-9, 51/1 (Padova, 1993), 333.

Alexios III.⁹⁹ Finally, there are two *tetartera* of Alexios I (1081-1118) and Manuel I (1143-1180) from Torcello; both found during the Piazza excavations conducted in the 1960s.

In this excavation, the layer to which Manuel's coin belonged also produced seven other twelfth- and thirteenth-century coins, four of them unidentifiable, while of the remaining three, two were issued under Frederick II (1220-1250), and the third coin was issued under Henry IV (1191-1197).¹⁰⁰ Alexios' earlier copper coin, on the other hand, came from the layer above, which contained Veronese, Venetian, Paduan coins as well as a coin from Ravenna—twelve copper or silver coins in total (including one *quartorolo* of Enrico Dandolo) extending to the end of the fourteenth century.¹⁰¹ Unfortunately, the Torcello excavations constitute the only extensive study from northern Italy where one is able to contextualize the Byzantine coins of the twelfth to the fourteenth centuries.

Given the focus in Venice on excavating ecclesiastical buildings, canal embankments, and houses, it is less likely that more Byzantine coins will emerge unless the focus itself shifts elsewhere.¹⁰² Overall, however, the Venetian evidence shows the same absence of Byzantine coins issued after the Frankish conquest that we can observe from the

⁹⁹ Asolati and Crisaffulli, *Ritrovamenti monetali di età romana nel Veneto*, 6.3 17/1/13; 6.3 17/13/14-15 (Padova, 1993), 164.

¹⁰⁰ L. Leciejewicz, E. Tabaczynska, S. Tabaczynski, *Torcello. Scavi 1961-1962* (Rome, 1977), 272-274.

¹⁰¹ *Ibid.*, 274-277. Alexios' coin might in this case be residual. No Byzantine coins are recorded for the later excavations conducted to the west of Santa Fosca in Torcello. Leciejewicz, *Torcello. Nuove ricerche archeologiche* (Rome, 2000).

¹⁰² Gelichi, "The Future of Venice's Past and the Archaeology of the North Eastern Adriatic Emporia during the Early Middle Ages," in *Studies in the Archaeology of the Medieval Mediterranean* ed. J. G. Schryver (Leiden, 2010), 175-210.

Otranto excavations. However, unlike Otranto, there is no evidence of a direct flow of coins from Achaia (or anywhere in Greece) to Venice in the thirteenth-century, at least judging from the absence of Frankish coins in Venice attests. Nevertheless, the excavations from Athens and Corinth did produce evidence of coin movements in the other direction, as we will see below.

It is not clear if the five Byzantine coins from Luni, situated between Lucca and Genoa in northwestern Italy, currently deposited in the Civico Museo della Spezia, were found in excavations. Interestingly, the collection has a single *tetarteron* issue of John III Doukas Vatatzes of Nicaea—the only Nicaean coin among the thirty nine coins I studied from Italy—while three of the remaining *tetartera* are tentatively attributed to Manuel I and one to an unidentified thirteenth-century Byzantine emperor.¹⁰³ The Museo Civico di Cherasco (80km north-west of Genoa) contains a surprisingly extensive collection of twelfth- and thirteenth-century Byzantine coins together with loyal/"Bulgarian" imitations.¹⁰⁴ While the evidence is limited and lacks the archaeological context which would warrant stronger conclusions, the presence of—possibly—Palaiologan copper coins alongside a Nicaean issue contrasts strongly with

¹⁰³ I was unable to see the published coin collection of the Museum.

¹⁰⁴ My sincere thanks are due to Professor Callegher for sending me the coin catalogue of the Museo Civico in Cherasco. Callegher, "Monete bizantine, ostrogote e longobarde della Collezione Adriani nel Museo Civico di Cherasco," (Cherasco, 2008), 86-91.

what we can see from Venice. This may reflect Byzantium's re-establishment of political and economic ties with Genoa under Michael VIII.

Another post-eleventh-century-Byzantine issue from north Italy—a *tetarteron* of Andronikos I—comes from a museum in Breno.¹⁰⁵ Finally, the Viennese exhibition of Italian art displayed coins from the Museum of Florence among which there was a single *hyperpyron* of Manuel I among other, pre-twelfth century imperial Byzantine coinage.¹⁰⁶ Our list of coins from north Italy includes *tetartera* and billon *trachea* of Manuel I, Andronikos I, and Alexios III. The latest coin that I am aware of from north Italy is a single *basilikon* (nearly pure silver imitation of the Venetian *grosso*) showing Andronikos II and Michael IX (1294-1320) on the reverse.¹⁰⁷

Overall, the Byzantine coin finds in both southern and northern Italy show, first, that their presence wanes after the middle of the thirteenth century; second, that judging by the small number of excavations this presence was limited to Apulia in the south, to the Veneto in the northeast and to Liguria in the northwest with some scattered showing also in Breno (Lombardy) and Castel Trosino (Marche). In all three areas, namely, the Veneto, Liguria and Apulia, the evidence of a twelfth-century link

¹⁰⁵ Arslan, *Repertorio*, n. 3543.

¹⁰⁶ W. Seipel, ed., *Die Magie des Goldes. Antike Schätze aus Italien* (Milan, 1996), 140-142.

¹⁰⁷ Callegher, "Monete bizantine," 86-91. There most likely are other post-eleventh-century coins of Byzantine provenance in Italian museums, and even though the museum material in general is always secondary to evidence from excavations and hoards, their overall presence does bear some importance.

with Greece and Asia Minor continues in the thirteenth and fourteenth centuries in a much reduced fashion with respect to the twelfth. To reiterate, of the thirty-nine coins, twelve are from the thirteenth and fourteenth centuries, the rest (27) are from the twelfth century. Luni, between Lucca and Genoa, is the only site with a Nicaean issue, while Otranto (Apulia) and Cherasco (Liguria) show evidence—even though very small—of contact with Epiros, Palaiologan and Latin rule in Constantinople and Greece. The Veneto produced only twelfth-century Byzantine coins. Apulia's numismatic contact with Greece grows exponentially after the twelfth century when Achaia was ruled by the Franks of Greece and the Angevins before both areas came under the latter's control following William II Villehardouin's death in 1278 (according to the stipulations of the Treaty of Viterbo). Among the Byzantine successor polities, however, Apulia seems to have had contact with the Palaiologans as well as with the Latin Empire and the Epirote state, as one can assume from the presence of their issues in excavations in Otranto and Egnazia.

CHAPTER 2

Hoards from Greece and Western Asia Minor: Regional Differences in the Twelfth and Thirteenth Centuries

In this chapter I analyze the numismatic evidence from the hoards, and in the following chapter, I analyze site finds, from the twelfth and thirteenth centuries in Greece and western Turkey. The purpose of this analysis is to understand the regional numismatic differences between mainland Greece and western Turkey during these centuries and from that analysis, to attempt to map out changes in the amount and distribution of wealth on both sides of the Aegean during this period.

I draw primarily from archeological finds and one must make certain assumptions in order to interpret the economic significance of these finds. Ordinarily, hoards are assumed to be evidence of socio-political instability, often marked by demographic contractions.¹⁰⁸ Socio-political instability of this sort takes many forms and military aggression is a significant cause of such instability. Natural disasters, such as earthquakes, famines and pestilence, which cause people to abandon their dwellings and leave behind stored valuables, are also potential causes of such instability.¹⁰⁹ Thus a standard way of interpreting the regional difference in the number and value of hoards

¹⁰⁸ Hendy, *Studies in the Byzantine Monetary Economy*, 112; Harvey, "Economy," 85. On the possible link between population decline and hoard evidence see, P. Turchin, W. Scheidel, "Coin Hoards Speak of Population Declines in Ancient Rome," *Proceedings of the National Academy of Sciences of the United States of America* 106.41 (2009), 17276-17279.

¹⁰⁹ R. Ellenblum, *The Collapse of the Eastern Mediterranean. Climate Change and the Decline of the East*, 950-1072 (Cambridge, 2012), 44-45.

(greater in both domains in Greece during this period) between Greece and western Turkey is to argue that there must have been greater socio-political instability in Greece during this time.

In this chapter and the next, I will argue that one can draw an alternative conclusion from such evidence, and I develop this interpretation below. I argue that a greater number and value of hoards can be evidence for greater wealth in a region and in such cases it may not necessarily be a marker for, or only for, socio-political instability. I am not arguing that the usual interpretation of socio-political instability is unreasonable. Rather, I am arguing that an alternative interpretation of such evidence must also be considered when examining hoard evidence, namely that hoard number and value is a marker for surplus wealth. Furthermore, in the next chapter, I bolster my conclusions in this chapter by looking at single find evidence at certain sites, which I will argue provides further evidence for my conclusions.

In interpreting the hoard evidence one should also consider, first, that hoards do not necessarily reflect the circulation of coins at a given place at the time of their burial. Hoards sometimes accumulate over a long period of time before the coins in the hoard are collectively put aside in a place considered safe and secure by their latest owner. Second, since the coins in a hoard are ordinarily selected on the basis of their value, hoards tend to contain coins that have more metallic value in them (e.g. higher

denominations or greater fineness). Thus one cannot assume, or rule out, that a single given hoard is a snapshot of what was circulating at the time that the coins were deposited. It is important to keep in mind that the content of a hoard is dependent on a number of variables, and it is difficult to know for sure which ones are operative for any single given hoard.

Despite these reservations, I argue that hoard evidence, and in particular, the concordant testimony of multiple hoards, when used in conjunction with stray finds from excavations (which I will examine in the next chapter), potentially give us evidence for patterns of accumulated wealth in a given area. The hoard evidence discussed below demonstrates that the aggregate number and value of both the twelfth-century and the thirteenth-century hoards from Greece are higher compared to the hoards from western Asia Minor and Constantinople, potentially reflecting differences in accumulated monetary wealth between Greece and western Asia Minor. In fact, we can even attempt to quantify these differences, as I do in this chapter.

As I discussed above, one might argue that the hoard evidence can be interpreted to mean that the military upheavals of both the twelfth and thirteenth centuries (mainly the Turkish and the Norman attacks) affected the stability of populations in Greece more than it did the populations in western Turkey and the hoard evidence reflects that. However, we have no conclusive evidence for this assumption and it may well be

the case that both regions were under a comparable amount of military distress. Thus this is a reasonable but not in any way a conclusive interpretation of the evidence.

Another potential objection to my argument is that this difference in hoard evidence is due to varying population figures between Greece and Asia Minor and such differences in population can potentially account for the difference in hoard numbers and value. In fact, if Greece were more populous than western Asia Minor this could serve as a strong reason why elevated hoard numbers ensue from there. That said, we again have no conclusive evidence at this time that there was significant population differences between the two regions. Thus this also is a reasonable but not conclusive interpretation of the evidence at hand.¹¹⁰

In the next chapter, I use single or stray find evidence from excavations in comparison to and in support of my conclusions from the hoard evidence regarding comparative wealth in the respective areas in the Aegean. Although my conclusions

¹¹⁰ Since Charanis, western Asia Minor and Greece have been considered populous and prosperous to an equal degree: P. Charanis, "Observations on the Demography of the Byzantine Empire," *Thirteenth International Congress of Byzantine Studies, Main Papers XIV* (Oxford, 1966), 456–61. For the discussion and a fairly extensive literature on the references to demographic opinions (of the whole Empire, not different regions within it) in this period see, Laiou and Morrisson, *Byzantine Economy*, 92–96. Laiou's figure for twelfth-century Byzantium is approximately nineteen million. *Ibid.*, 93. Also see, Stathakopoulos, "Population, Demography, and Disease," 309–316. For a comparative study between Byzantium and the Carolingian Empire see, M. McCormick, "From One Center of Power to Another: Comparing Byzantine and Carolingian Ambassadors," in *Deutsche Königspfalzen. Beiträge zu ihrer historischen und archäologischen Erforschung 8* (Göttingen, 2007), especially n. 22, p. 53. For exemplary regional studies see, J. Lefort, "Population et peuplement en Macédoine orientale IXe- XIVe siècle," repr. in *idem.*, *Société rurale et histoire du paysage à Byzance* (Paris, 2006), 230–247; D. Kyritzés and K. Smyrlis, "Les villages du littoral Égéen de l'Asie Mineure au Moyen Âge," in J. Lefort, C. Morrisson, J.-P. Sodini, eds., *Les villages dans l'Empire byzantin (IV^e- XV^e siècle)* (Paris, 2005), 437–451.

about economic development from this evidence are not exclusive of interpretations of socio-political disruption or population estimates, it is worth noting that I not only offer a reasonable alternative explanation for the hoard evidence but I bolster this with further compelling evidence from excavations. I am suggesting that we consider an alternative explanation for this hard evidence.

The single finds from excavations bear at least equal weight in our ultimate conclusion, because they inform us about the trends in coin availability from a single site over a longer period of time, and their deposits, usually accidental, are not subject to the same considerations that can affect the composition of a single hoard. I have thus used coin finds from excavations in conjunction with hoard evidence. Together, these very different types of deposit evince some of the same patterns. This reinforces the power of their testimony in offering a consistent, representative, even if incomplete, picture of coin availability, accumulated wealth, and economic development on either side of the Aegean.

Regarding what the totality of site finds and hoards can tell us about the actual coin circulation and availability at a given site in a given period, Grierson in his presidential addresses to the Royal Numismatic Society, writes that “the sampling of a sample does not necessarily involve distortion.”¹¹¹ He then lists and discusses a series of

¹¹¹ Grierson, “The Interpretation of Coin Finds 1,” *NC* 7 5 (1965), is reprinted in *idem.*, *Later Medieval Numismatics (11th-16th Centuries)*, (London, 1979), XXI, vii.

important reservations about how site finds and hoards may be used together to interpret the actual circulation of coins on the ground.¹¹² In this regard, he points out the importance of the aggregate size of the overall material analyzed (both from excavations and hoards), factors that affect the survival of coins such as their size and value, as well as the importance of the overall consistency of the analyzed evidence. In light of these sage observations, we will see that the hoards and site finds—both of which are sizable enough—do indeed reveal a consistent picture about the regional differences in the twelfth and thirteenth centuries between Greece and western Asia Minor. In performing this analysis my purpose is to understand, first, the differences in monetary circulation between Greece and western Asia Minor in the twelfth century, and second, to assess how these differences changed in the thirteenth century.

I will analyze these two regions individually first, looking at both hoard numbers and value, before, in the next chapter, comparing the findings from hoards with evidence from excavation sites in Greece and western Turkey. When combined with the hoard evidence, the excavated sites give us more reliable evidence for regional differences in wealth than examination of hoard evidence alone. On the basis of the hoards alone this conclusion is suspect, because the most populous and arguably the most wealthy city and its environs produced only two hoards in total. However, as we

¹¹² Grierson, "The Interpretation of Coin Finds 2," *NC* 7 6 (1966), reprinted as "Part II" in *Later Medieval Numismatics*, XXII, i-xv.

shall in the next chapter, the hoard evidence and the excavation evidence complement each other, and provide some exciting potential insights into how much value and wealth was available in either region during the twelfth and thirteenth centuries. Based on the above discussion, if indeed the population figures and political stability were comparable, then it seems that Greece enjoyed more wealth and value during the twelfth century than in western Turkey.

Twelfth-century coin hoards from Greece (28)¹¹³ are consistently more numerous, larger in size, have greater aggregate number of coins and overall value than the twelfth century coin hoards from western Asia Minor and Constantinople (5).¹¹⁴ When

¹¹³ Adrameri: *Σύνταγμα Βυζαντινών Θησαυρών*, 95; Athens 1982: A. Oikonomidou, I. Touratsoglou, E. Tsourte-Koule, M. Krikou-Galane, “Ο θησαυρός Κομοστήνης 1979 Συμβολή στην Κυκλοφορία των Τετάρτερων του IB’ αι. Μ. Χ.,” *BF* 14.1 (1989), 403; Western Attika 1968: *ibid.*, 404; Corinth 1911-1912: *Σύνταγμα Βυζαντινών Θησαυρών*, 86; Corinth I and Corinth II: Hendy, *Coinage and Money*, 334-335; Drosato Eupaliou Doridos: *Σύνταγμα Βυζαντινών Θησαυρών*, 85; Gerakini 1932: Touratsoglou, “Unpublished Byzantine Hoards of Billon Trachea,” 146; Grivitsa Pylias Messenia: *Σύνταγμα Βυζαντινών Θησαυρών*, 84-85; Hagios Horos (Mt. Athos): A. Oikonomidou, I. Touratsoglou, E. Tsourte-Koule, M. Krikou-Galane, *op. cit.*, 394; Kalentzi Fragma Marathon 1928: *ibid.*, 401; Kaparelli 1927: *ibid.*, 405; Kastoria 1945: *Σύνταγμα Βυζαντινών Θησαυρών*, 95; Kastri Attikes 1952: A. Oikonomidou, I. Touratsoglou, E. Tsourte-Koule, M. Krikou-Galane, *op. cit.*, 402; Kephisia 1893: *Σύνταγμα Βυζαντινών Θησαυρών*, 93; Komotini 1979: A. Oikonomidou, I. Touratsoglou, E. Tsourte-Koule, M. Krikou-Galane, *op. cit.*, 394; Magoula Ithomes Trikalon 1900: *Σύνταγμα Βυζαντινών Θησαυρών*, 102; Magoula Eleusinos 1968: A. Oikonomidou, I. Touratsoglou, E. Tsourte-Koule, M. Krikou-Galane, *op. cit.*, 404; Naxos 1967: *Σύνταγμα Βυζαντινών Θησαυρών*, 98; Oreoi Euboeias 1935: A. Oikonomidou, I. Touratsoglou, E. Tsourte-Koule, M. Krikou-Galane, *op. cit.*, 399; Paliotheologou Melivoias 1988: *Σύνταγμα Βυζαντινών Θησαυρών*, 94; Thebes 1992: *Σύνταγμα Βυζαντινών Θησαυρών*, 93; Thespies 1966: *ibid.*, 399; Thessalonike 1933: *ibid.*, 395 and another Thessalonike 1933: *Σύνταγμα Βυζαντινών Θησαυρών*, 83-84; Thessalonike 1966: Touratsoglou, “Unpublished Byzantine Hoards of Billon Trachea from Greek Macedonia and Thrace,” *Balkan Studies* 14.1 (1973), 156; Unknown Greek 1911: *Σύνταγμα Βυζαντινών Θησαυρών*, 100; Unknown Greek II: *Σύνταγμα Βυζαντινών Θησαυρών*, 102. See Appendix 1 for summary hoard contents.

¹¹⁴ Istanbul A, Pınarhisar, Izmir, Fethiye, and Aphrodisias 1969 hoards are certainly from western Turkey; the provenance of the Kapamacı Hoard, for example, is unknown and although it is thought to be from Asia Minor I did not include it among western Turkish hoards. Istanbul A (1088 billon *trachea*): Hendy,

the total values of these hoards are calculated, we find that the total value of coins from the twelfth century in Greece is approximately 10,000 billion *trachea* (*stamena*)¹¹⁵ while those from western Turkey are approximately 2,100 billion *trachea*. Given the disproportion in the number of hoards (Greece: western Turkey, about 10/1) the disproportion in the value of the hoards too might seem to be an obvious artifact of this variation in overall hoard number (the ratio of the value in Greece versus the ratio of the value in western Turkey is about 10:2), however, that should not be assumed. It certainly would be possible for there to be a greater number of hoards with an overall lesser value. These are two distinct and at least partially independent variables—number of hoards overall and overall value of hoards—and it is important to note that both are significantly greater in Greece than western Asia Minor and Constantinople. This provides some evidence for arguing that there is greater wealth in Greece than western Asia Minor and Constantinople during this century.

Let us now turn to the thirteenth-century hoards and what they tell us about the available wealth in the thirteenth century in the regions under scrutiny. The total

Coinage and Money, 347-348; Pınarhisar (seven *hyperpyra*): R. Ashton, "Coin Hoards, Turkey," *NC* 154 (1994), no. 59, 284; Izmir (fifty-eight billion *trachea*): S. Bendall, "Byzantine Hoards," *CH* VII (1985), 237; Fethiye (twelve *hyperpyra*): Hendy, "Seventeen Twelfth and Thirteenth Century Byzantine Hoards," *CH* VI (1981), 67-68; Aphrodisias 1969 (four electrum *trachea*): Hendy, "Seventeen Twelfth and Thirteenth Century Byzantine Hoards," *CH* VI (1981), 62. See Appendix 1 for summary contents of these hoards.

¹¹⁵ I chose to calculate these values in the most commonly circulating coin in both areas in the twelfth and the thirteenth centuries—the billion *trachy*, otherwise known as the *stamenon* valued at 1/48th to 1/60th of the gold *hyperpyron*. I used the latter thirteenth-century figure for thirteenth- and the former figure for twelfth-century billion *trachea*. See Papadopoulos, "De l'unité à l'éclatement," vol. 1, 102.

number of thirteenth-century hoards from western Asia Minor and Constantinople are higher than the total number of twelfth-century hoards in that region (seventeen hoards in the thirteenth century versus five hoards in the twelfth century),¹¹⁶ but there are still approximately three times more hoards from the thirteenth century overall in Greece than in western Asia Minor and Constantinople combined (forty-four hoards in Greece and seventeen hoards in western Asia Minor and Constantinople).¹¹⁷ So, although

¹¹⁶ In addition to the hoards with at least twenty coins with either 1221 or 1260 *t.p.q.* dates cited in Table 1. 5 and Table 1. 6 below, there are these additional thirteenth-century hoards from western Asia Minor and Constantinople: Sinekli: "Seventeen Twelfth and Thirteenth Century Byzantine Hoards," 70-71; Troy: Hendy, *Coinage and Money*, 393-394; Torbalı: Hendy, *Coinage and Money*, 389-390; Kocaeli: Hendy, "Seventeen Twelfth and Thirteenth Century Byzantine Hoards," *CH VI* (1981), 68 and Oberlander-Tarnôveanu, E., "Les hyperpères de type Jean Vatatzes III-Classification, chronologie et l'évolution du titre (à la lumière du trésor d'Uzun Bair), *Istro-Pontica* (2000), 506-509; Pergamon I: Hendy, "Seventeen Twelfth and Thirteenth Century Byzantine Hoards," *CH VI* (1981), 65-66, and Oberlander-Tarnôveanu, E., "Les hyperpères de type Jean Vatatzes III," 506-509. See Appendix 1 for the remaining hoards not listed under Table 1. 6 below.

¹¹⁷ In addition to the hoards with at least twenty coins with either 1221 or 1260 *t.p.q.* dates cited in Table 1. 4, there are these additional twenty-two hoards from Greece that either have less than twenty coins or do not meet either *t.p.q.* date but are thirteenth-century hoards: These hoards include the two hoards from Arta: H. Mattingly, "A Hoard of Thirteenth-Century Coins at Arta in Epirus," *NC* 5.3. (1923), 33-41 and Touratsoglou "Θησαυρός άσπρων τραχέων / 1983 από την Άρτα," *AD* 36 (1981), 209-226, and the following: Brauron: Metcalf, "The Brauron Hoard and the Petty Currency of Central Greece 1143-1204," *NC* 7.4 (1964), 251-259 and *Σύνταγμα Βυζαντινών Θησαυρών*, 103; Central Macedonia: Touratsoglou, "Unpublished Byzantine Hoards of Billon Trachea," 154; Corinth III: Hendy, *Coinage and Money*, 335; Drama, Erymanteia and Athens hoards: *Σύνταγμα Βυζαντινών Θησαυρών*, 121; Edessa 1968: Touratsoglou, "The Edessa/ 1968 Hoard of Billon Trachea," *AD* 28.1 (1973), 64-70; Episkopi 1970: Touratsoglou, "Unpublished Byzantine Hoards of Billon Trachea," 144; Gerakario 1972: Touratsoglou, "Unpublished Byzantine Hoards of Billon Trachea," 145; Kordokopi: Athanasoulis and Baker, "Medieval Clarentza. The Coins 1999-2004 with additional medieval coin finds from the nomos of Elis" *NC* 168 (2008), 285; Macedonia (Thessalonike Museum): Touratsoglou, "Unpublished Byzantine Hoards of Billon Trachea," 153; Kephallenia: *Σύνταγμα Βυζαντινών Θησαυρών*, 106; Naxos 1947: *Σύνταγμα Βυζαντινών Θησαυρών*, 107; Neapolis: Touratsoglou, "Unpublished Byzantine Hoards of Billon Trachea," 155; Neon Rhysson: Touratsoglou, "Unpublished Byzantine Hoards of Billon Trachea," 156; Sparta: *Σύνταγμα Βυζαντινών Θησαυρών*, 114; Thessalonike 1963: *Σύνταγμα Βυζαντινών Θησαυρών*, 123; *Σύνταγμα Βυζαντινών Θησαυρών*, 107-108; five "Unknown Greek" hoards: *Σύνταγμα Βυζαντινών Θησαυρών*, 110-111, 122-123, 124; Xerochori 1957: A. Tzamalıs, "Η Πρώτη Περίοδος του Τορνείσιου. Νέα Στοιχείε από ένα Παλαιο Εύρημα" *NomXron* 9 (1990), 102; Xerochori 2001: Athanasoulis and Baker, "Medieval

overall hoard number increases significantly in western Asia Minor and Constantinople, Greece still has significantly greater numbers of hoards overall in both centuries.

The total value of twelfth-century hoards found in Greece amounts to approximately 7,600 billion *trachea*, and the total value of thirteenth-century hoards from Greece amounts to approximately 8,900 billion *trachea*.¹¹⁸ For thirteenth-century Greece, one should definitely add the surviving non-Byzantine hoards to the equation as the area was supplied not only by the twelfth-century Byzantine issues and their thirteenth-century imitations but also by the *deniers tournois*, *grossi* and the *sterlings*. When this is included in the total value in Greece in the thirteenth century, it amounts to a total of approximately 15,000 billion *trachea*, which is about twice the twelfth-century figure. In Constantinople and its environs, on the other hand, the total value of twelfth-century hoards is worth approximately 1,400 billion *trachea* and the total value of thirteenth-century hoards is worth approximately 5,000 billion *trachea*.¹¹⁹ The fact that there are only two twelfth-century hoards from neighboring Constantinople (including those from eastern Thrace) is of course striking but remains without an obvious explanation. In western Asia Minor, based on three hoards (Fethiye, Izmir, and Aphrodisias II), the

Clarentza. The Coins 1999-2004 with additional medieval coin finds from the nomos of Elis" NC 168 (2008), 287. See Appendix 1 for the remaining hoards not listed under Table 1. 5 below.

¹¹⁸ See Appendix 1 and Table 1. 5. for a summary of hoard contents.

¹¹⁹ See Appendix 1 and Table 1. 7. below.

total value of twelfth-century hoards is only approximately 700 billion *trachea*, while the total value of the surviving thirteenth-century hoards amounts to approximately 15,000 billion *trachea*.¹²⁰ Thus in western Asia Minor the total value of the thirteenth-century hoards is approximately twenty-one times the total value of the twelfth-century hoards from the same area, while, as a comparison, the thirteenth-century hoards' total value for Greece rose about four times, and the total value of surviving hoarded value from thirteenth-century Constantinople is about three times that of the previous century. Overall, Greece has more hoards and more value across the two centuries, but western Asia Minor shows a much greater increase in number of hoards and value between the two centuries.

Table 1. 4 Comparative Total Values of Hoarded Coins in Greece, Constantinople and Western Asia Minor

	Total Value of Twelfth-Century Byzantine Coin Hoards	Total Value of Thirteenth-Century Byzantine Coin Hoards	Total Value of the Non-Byzantine Coins Hoarded in the Thirteenth Century
Greece	7,600	8,900	6,100
Constantinople	1,400	5,000	-
wAsia Minor	700	15,000	-

In the twelfth century, there was a large difference in the total number of hoards from Greece, Constantinople, and western Asia Minor. The difference in the total number of hoards between regions and across the two centuries in itself is worth noting

¹²⁰ See Appendix 1 and Table 1. 6 below.

because it demonstrates that Constantinople, as well as western Asia Minor, still produced far fewer hoards in the thirteenth century compared to Greece. Furthermore, the total value of coins from the hoards from Greece is about the same as Asia Minor in the thirteenth century; in the twelfth century, however, the difference between Asia Minor and Greece in terms of total value of hoards was approximately 11 times. These differences may be due to actual differences in wealth between the two regions.

If we consider the figures from Asia Minor, in this area, the difference between the twelfth and the thirteenth centuries in terms of the total number of hoarded coins—as well as their total value—is remarkably high (twenty-one times). As we will see in the next chapter, the differences regarding the twelfth- and the thirteenth-century western Asia Minor and mainland Greece is consistent for both the hoard and site evidence and they can be taken with some confidence to represent the contours of the reality on the ground in these two centuries regarding wealth and coin circulation with some confidence. This observation is worthy of our attention since the consistency in the overall story that both the hoards and excavations tell us may be an important one. Constantinople's total value yield in the thirteenth century (about 4,000 billion *trachea*), however, is still significantly lower than that of both Greece and western Asia Minor in the thirteenth century. This seems to be an anomaly, and it remains without a viable explanation.

Looking forward from the thirteenth into the fourteenth century, on the other hand, it is worthy of note that without exception all of the fourteenth-century *hyperpyra* i.e., gold hoards come from Constantinople,¹²¹ while the remaining silver and billon hoards come from northern Greece and Bulgaria only. By the fourteenth century, southern Greece and Asia Minor were in numismatic and, to a large extent political terms also, outside the boundary of Greek/Byzantine sovereignty which can easily be traced by studying the hoard evidence. Given the fact that both western Asia Minor and southern Greece were largely ruled by different polities, this result is not at all surprising.

To sum up, there seems to have existed a conspicuous disparity between the aggregate value of twelfth-century hoards hailing from Greece (7,600 billon *trachea*), and those from western Asia Minor (700 billon *trachea*) and Constantinople (1,400 billon *trachea*). In the thirteenth century, the ratios indicating the difference concerning the total numbers and values of the twelfth- and the thirteenth-century hoards declined in favor of western Asia Minor. In terms of the total value of hoards from the thirteenth century, western Asia Minor under Nicaean rule, though smaller in size in the thirteenth century than in the twelfth, had more “hoardable” wealth in that century than in the twelfth. In Greece, on the other hand, both the total value and the number of

¹²¹ All of the *hyperpyra* hoards are from Constantinople. The total value of all of the fourteenth-century hoards is about 582,000 billon *trachea*.

hoards continue to rise in the thirteenth with respect to the twelfth century (by approximately two times—in hoard value), but not as drastically as it did in western Asia Minor (by twenty-one times). This regional variance that clearly dates from the twelfth century itself needs an explanation, one that clearly cannot be based on the hoarded coins alone.¹²²

Further Observations Based on Hoard Evidence: Twelfth-Century Issues in Thirteenth-Century Hoards

A detailed examination of the contents of the thirteenth-century hoards allow us to make some additional observations. Both excavation reports and hoard evidence indicate that twelfth-century coins were still available in the thirteenth century.¹²³ There is ample data on hoards, and I have used a total of thirty-four thirteenth-century hoards from mainland Greece and Asia Minor that contain a minimum of twenty coins each.¹²⁴

¹²² For an excellent overview on the limitations of numismatic evidence, n. 111 and 112 above.

¹²³ One quick note regarding the division of the twelfth-century coins: I have included all the coins from the 1092 reform to the end of the reign of Isaac Angelos in 1195 and have excluded the last three years of the rule of Alexios III (1195-1203) as the estimate dates for his penultimate issues in the twelfth century place them between 1195 and 1197. None of the rare coins of the joint rule of Isaac II and Alexios IV from July 1203 to February 1204 are included under Isaac II. Hence, in the dataset the cut off between the twelfth and the thirteenth century is as accurate as it can possibly be, given the current state of our knowledge. Even though it makes more historical sense to start the thirteenth century in 1204, I started it at 1198 whenever possible (some sources do not give the types of Alexios coins so it is not possible to know when they were issued). Undated or unspecified Alexios III coins are by default counted as twelfth-century issues.

¹²⁴ Table 1. 5: Aiani: I. Touratsoglou, "Unpublished Byzantine Hoards of Billon Trachea from Greek Macedonia and Thrace," *Balkan Studies* 14.1 (1973), 141; Amorgos: *Σύνταγμα Βυζαντινών Θησαυρών του Νομισματικού Μουσείου* (Athens, 2002), 105; Argynopolis: *Σύνταγμα Βυζαντινών Θησαυρών*, 115; Cheimatides, Florines: *Σύνταγμα Βυζαντινών Θησαυρών*, 103; Drama: Touratsoglou, "Unpublished Byzantine Hoards of Billon Trachea from Greek Macedonia and Thrace," *Balkan Studies* 14.1 (1973), 142; Koinoteta: Touratsoglou, "Θέσαυρος άσπρον τραχέον απο τα Βραστα Χαλκιδικής," *AD* 8 (1975), 124-

As one can see from the list of thirteenth-century hoards and their contents below, the percentage of twelfth-century issues in these hoards significantly vary from hoard to hoard. Because people tend to hoard higher value coins rather than lower value coins, the variation in hoard content might owe to the higher metallic value of twelfth-century coins with respect to their thirteenth-century counterparts. That said, the metallic value of the most-commonly hoarded denomination, the billon *trachea*, as we have mentioned in the introduction to this part, drops from about six percent silver content at the middle of the twelfth century to about two percent at the end of the same century, and then to about 0.5 percent for the loyal and Latin imitations.¹²⁵ Yet both these late-twelfth-century coins and the thirteenth-century imitations were hoarded extensively. For this reason, the metallic value of coins cannot be the only reason behind people's preferences; the old coins' presence at the time of hoarding likely played an important role too.

130; Kozani I, II and III: Touratsoglou, "Unpublished Byzantine Hoards of Billon Trachea," 149-150; Leukochori Lachana: *Σύνταγμα Βυζαντινών Θησαυρών*, 114; Libadi Elassonas: M. Karamesine-Oikonomidou, "Τρεῖς Θησαυροὶ τοῦ 13ου αἰώνα του Ν.Μ.Α.," *Byzantina* 13B (1985), 985 and M. Karamesine-Oikonomidou, "Athenai 1974," *AD 29 B1 Chronika* (1973-1974), 13-14; Macedonia (Thessalonike): Touratsoglou, "Unpublished Byzantine Hoards of Billon Trachea," 153; Macedonia 1958: Touratsoglou, "Unpublished Byzantine Hoards of Billon Trachea," 152; Males Ierapetras: *Σύνταγμα Βυζαντινών Θησαυρών*, 113; Metsovo: *Σύνταγμα Βυζαντινών Θησαυρών*, 123; Paros 1927: *Σύνταγμα Βυζαντινών Θησαυρών*, 111-112; Thera 1910: *Σύνταγμα Βυζαντινών Θησαυρών*, 116; Thrace 1962: Touratsoglou, "Unpublished Byzantine Hoards of Billon Trachea," 157; Kolchikon 1961: Touratsoglou, "Unpublished Byzantine Hoards of Billon Trachea," 147; Macedonia 1988: *Σύνταγμα Βυζαντινών Θησαυρών*, 125; Mikro Eleutherochori, Elassonas 1971: M. Karamesine-Oikonomidou, "Τρεῖς Θησαυροὶ τοῦ 13ου αἰώνα του Ν.Μ.Α.," *Byzantina* (1985), 986; Thebes 1967: M. Karamesine-Oikonomidou, "Athenai 1974," *AD 29 B1 Chronika* (1973-1974), 13-14.

¹²⁵ See Papadopoulou, "De l'unité à l'éclatement," vol. 3, Annexe C (Analyses de composition métallique).

Map 1. 1 Thirteenth-Century Hoards from Greece and western Asia Minor

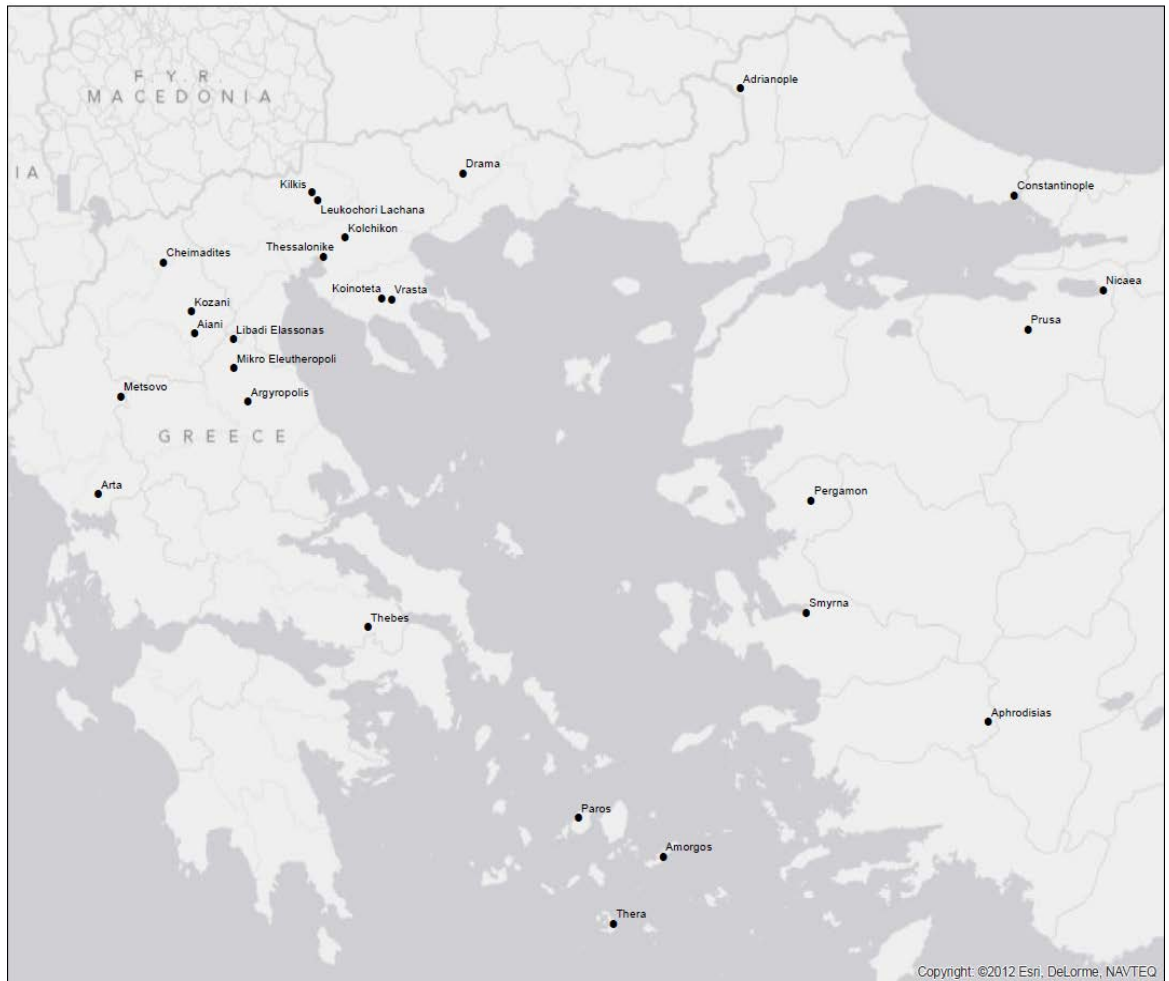


Table 1. 5. List of Thirteenth-Century Hoards from Greece and the Islands with Twelfth-Century Coins

Hoard	Total number of coins in hoard	Total approximate value of coins in hoard in <i>billon trachea</i>	The total number/percentage of twelfth-century coins in the hoard	Approximate deposition date (<i>t.p.q</i>)
1. Aiani 1969	34	34	5 (14.7 percent)	1221
2. Amorgos 1908-1909	89	89	20 (22 percent)	1221
3. Argyropolis 1893	776	776	15 (1.9 percent)	1221
4. Cheimatides, Florines 1983	80	80	19 (23.7 percent)	1221
5. Drama 1962	2,750	2,750	1,300 (47 percent)	1221
6. Koinoteta	300	300	26 (8.6 percent)	1221
7. Kozani II	26	26	3 (11.5 percent)	1221
8. Kozani III	326	326	12 (3.6 percent)	1221
9. Kozani IV	293	293	16 (5.4 percent)	1221
10. Leukochori Lachana, Kilkis 1955	896	896	53 (5.9 percent)	1221
11. Libadi Elassonas	717	717	80 (11 percent)	1221

Table 1. 5. (Continued)

12. Macedonia (Thessalonike)	541	541	200 (40 percent)	1221
13. Macedonia 1958	122	122	40 (32.7 percent)	1221
14. Males Ierapetras	150	150	20 (13 percent)	1221
15. Metsovo 1979	105	105	5 (4.7 percent)	1221
16. Paros 1927	50	50	11 (22 percent)	1221
17. Thera 1910	451	451	120 (26 percent)	1221
18. Thrace 1962	50	50	2 (4 percent)	1221
19. Kolchikon 1961	92	92	18 (19.5 percent)	1260
20. Macedonia 1988	29	29	6 (20.6 percent)	1260
21. Mikro Eleutherochori, Elassonas 1971	412	412	101 (24.5 percent)	1260
22. Thebes 1967	604	601	3 (0.5 percent)	1260

Table 1. 6. List of Thirteenth-Century Hoards from western Asia Minor with Twelfth-Century Coins¹²⁶

Hoard	Total number of coins in hoard	Total approximate value of coins in hoard in <i>billon trachea</i>	The number/percentage of twelfth-century coins in the hoard	Approximate deposition date (t.p.q)
1. (23.) Aphrodisias (Geyve), Aydın 1967	47	107	38 (80 percent)	1221
2. (24.) Bayındır (Izmir)	396	396	343 (85.9 percent)	1221
3. (25.) Bursa	434	434	11 (2.5 percent)	1221
4. (26.) Iznik_Bursa?	255	4,080	3 (1.2 percent)	1221
5. (27.) Nicaea? Hoard 1967	245	245	165 (67.3 percent)	1221
6. (28.) Pergamon II	1,058	1,058	866 (81.8 percent)	1221

¹²⁶ Aphrodisias (Geyve), Aydın 1967: Hendy, "Seventeen Twelfth and Thirteenth Century Byzantine Hoards," *CH VI* (1981), 62-63; Bayındır (Izmir): Hendy, *op. cit.*, 64-65; Bursa: Hendy, *op. cit.*, 66-67; Iznik_Bursa: Hendy, *Catalogue*, vol. 4.2, 453; Nicaea? Hoard 1967: Metcalf, "A Hoard of Billon Trachea from the Empire of Nicaea, c. 1215-1220," *Hamburger Beiträge zur Numismatik* 30-32 (1978), 63-66; Pergamon II: Hendy, *Coinage and Money*, 329-330; Edirne Postallar: Hendy, *Coinage and Money*, 381-382. Interestingly, the hoarding pattern of twelfth-century coins for Asia Minor is particularly high; it is not certain if this is caused by the lower number of hoards from this area (seven hoards). It is not certain, what caused the lower overall rate of hoarding in western Asia Minor, whether it was caused by lower population figures, or high security, or simply because less wealth available in western Asia Minor with respect to Greece, cannot be determined. The variance between Greece and western Asia Minor, on the other hand, is one that is worth noting.

Table 1. 7. *List of Thirteenth-Century Hoards from Constantinople and its Environs with Twelfth-Century Coins*¹²⁷

Hoard	Total number of coins in hoard	Total approximate value of coins in hoard in <i>billon trachea</i>	The total number/ average percentage of twelfth-century coins in the hoard	Approximate deposition date (<i>t.p.q</i>)
1. (29.) Istanbul B	469	469	13 (3 percent)	1221
2. (30.) Istanbul Yenimahalle	152	152	2 (1 percent)	1221
3. (31.) Istanbul 1946	1,088	1,088	500 (45 percent)	1221
4. (32.) Istanbul 1967	514	514	16 (3 percent)	1221
5. (33.) Istanbul 1977	212	212	129 (60 percent)	1221
6. (34.) Edirne Postallar	376	376	15 (4 percent)	1260

I used the hoard data to calculate the proportion of twelfth-century to thirteenth-century coins in the thirteenth-century hoards in order to understand the hoarding pattern of twelfth-century issues during the first and second halves of the thirteenth century. The finds allow us to make three conclusions. First, for both hoard groups (those with a *t. p. q.* of 1221 and 1260), slightly less than half of the hoards of each group contain ten percent or less of twelfth-century coins. This is consistent across both time

¹²⁷ Istanbul B: Hendy, *Coinage and Money*, 348-349; Istanbul Yenimahalle: Hendy, *Coinage and Money*, 401; Istanbul 1946: Metcalf, "The Istanbul Hoard of 1946 and the Date of the Neatly Clipped Trachea," *NCirc* 83 (1975), 330-335; Istanbul 1967: Papadopoulou, "De l'unité à l'éclatement," vol. 3, 131-132 (previously unedited material); Istanbul 1977: "A Hoard of Trachea from the Reign of Theodore I of Nicaea, 1204-1222," *NCirc* 85 (1977), 105.

periods. Second, for hoards with a *t. p. q.* of 1221, the highest ratio of twelfth to thirteenth century coins is 85.9 percent, while for the hoards with a *t. p. q.* of 1260 the highest ratio is 24.5 percent. Third, approximately a third of the hoards that have a *t. p. q.* of 1221 each contain more than thirty percent of twelfth-century coins. By contrast, all of the hoards with a *t. p. q.* of 1260 each contain less than 24.5 percent of twelfth-century coins. So overall, even though there does seem to be a great variation in the percentages of the twelfth-century coins that survived in each of the thirteenth century hoards, it is notable that a significant number (approximately thirty percent) of hoards with a *t. p. q.* of 1221 have a much greater ratio of twelfth to thirteenth century coins than hoards with a *t. p. q.* of 1260.

Most of the coins which were hoarded during the thirteenth century are billon *trachea*. The hoard data for mainland Greece (twenty-three in total for both *t.p.q.* of 1221 and 1260; only four with a *t.p.q.* of 1260) are quite evenly distributed; that is, Thrace, Macedonia, Thessaly, the islands and Peloponnese are all represented. Concerning the twelve hoards from Constantinople and Asia Minor as well,¹²⁸ the distribution remains geographically even. Of the twelve, six are from Constantinople and its immediate surroundings, one from Pergamon, three from Nicaea/Prusa and one each from

¹²⁸ Constantinople is treated separately, as the former capital and economic/political center, that was under Latin rule in the first half of the thirteenth century.

Adrianople and Smyrna, which altogether present a similarly balanced spread given the geographical extent of the Nicaean and Latin states in the thirteenth century.

The time spread of the hoards from Constantinople and Asia Minor is more uneven: all of the hoards with the exception of the Edirne Postallar Hoard have a 1221 A.D. *t. p. q.*; the former is the only hoard among the twelve with a 1260 A.D. *t. p. q.* Overall, we have at hand more coin hoards from the first half of the thirteenth century than from its second half, in both Greece and western Asia Minor (only five in thirty-four have a 1260 *t.p.q.*). We do not know what cause(s) underlie this difference. Political instability that was created in the wake of 1204 is one possible explanation.

Among the twelfth-century coin issues, those most commonly present in hoards are the billon *trachy* issues of Manuel I (1118-1180). According to Hendy and Charles the coins' privy marks show that three or four workshops were set aside for the production of the billon *trachy* under this ruler.¹²⁹ The high visibility of Manuel I's billon *trachea* among the finds may be because more of these denominations were minted by that emperor. In addition, the billon *trachea* issued earlier in his thirty seven year long reign—specifically, the first two issues—had higher (i.e. about six percent) silver content, as is mentioned above.¹³⁰ It should be remembered that Manuel I is also

¹²⁹ Hendy and J. A. Charles, "The Production Techniques," 20.

¹³⁰ Manuel I's coins were certainly issued in higher numbers and they had higher silver content, which explains their higher survival rate in hoards and excavations. The most recent discussion of this phenomenon is in Papadopoulou, "De l'unité à l'éclatement," vol. 1, 191-192.

believed to have opened new mint(s) in southern Greece specifically to mint the *tetarteron* and its half. It seems that the imperial administration was responding to a need for low- to medium- denomination currency in a monetized economy in southern Greece by the middle of the twelfth century. Overall, Manuel I both ruled for thirty-seven years and, also arguably, issued notably large numbers of good quality coins, all of which combine to make his coins desirable and available at least half a century after they were minted.

Grierson's data from the Palaiologan period contrasts significantly with the overall figures from the twelfth and the thirteenth centuries. First, there are no hoards containing Byzantine coins (either Nicaean or Palaiologan) from Asia Minor, while the total number of hoards containing Palaiologan issues up to the mid-fourteenth century hailing from sites in Greece and the Balkans is also quite low (thirteen in total) in comparison with the twelfth and the thirteenth centuries;¹³¹ the same is true of Palaiologan coins from excavations.¹³² The largest and the most valuable hoards of the period are the two gold *hyperpyra* hoards from Constantinople.¹³³ The rest are gold *hyperpyra* and silver *basilikon* hoards from northern Greece (Thessaly and Macedonia in particular) and Bulgaria, with occasional and minimal amounts of Frankish silver

¹³¹ Grierson, *Catalogue*, 5.1, 12-15.

¹³² *Ibid.*, 12 and *passim*.

¹³³ The Cerrahpaşa and Istanbul A hoards containing 2,500 and ca. 10,000 *hyperpyra* of Andronikos II and Michael IX. *Ibid.*, 14.

tournois in the mix.¹³⁴ The fourteenth-century hoards, then, reflect a crude but realistic picture of the extent of the Byzantine state and important nodes of commercial/economic activity within it, with Constantinople looming large and northern Greece ranking second. The lower aggregate number of coin hoards containing Byzantine coins—but not the total value of these coins most of which are gold *hyperpyra*— and the geographic distribution of these hoards contrast with the hoard evidence from the previous two centuries.

The Presence of Non-Local Issues in Greece and Western Asia Minor: A Sign of Economic Demand for Currency (in Greece) and Monetary Policy (in western Asia Minor)?

Another difference between Greece and western Asia Minor is the presence of non-local, western issues in the cities in Greece throughout the thirteenth century. Such issues appear only in the second half of the thirteenth century in the territory that is now western Turkey. In Greece the minting of local Frankish issues began in the second half of the same century and surely reflects the need arising from an insufficient coin supply. One should add here that the hoard evidence also confirms the post-1260 dating of the beginning of the minting of the local *deniers* because none of the hoards with 1260 *terminus post quem* contain *deniers*; only those with early fourteenth century *termini* do. The absence of imported coins in western Asia Minor before ca. 1250, on the other hand,

¹³⁴ Grierson's fourteenth century hoard descriptions refer only to hoards with Byzantine/Palaiologan coins.

could be explained by the Nicaeans controlling the influx of the non-local coins.¹³⁵ The presence of imported coins after 1250 may be explained by a sweeping policy change in how the economy was run. At around the middle of the thirteenth century the economic growth that the Nicaean rulers (especially John III) instigated for their state via protective measures came to a halt; the regulation of foreign currencies under the Palaiologoi was not nearly as strict as it had been under the Nicaean rulers as we can see from the surviving foreign issues found on excavated sites and in the hoarded material.

Regarding Constantinople, suffice it to say here again that the low numbers of hoard data (two from the twelfth, five from the thirteenth century) is surprising and as yet cannot be explained sufficiently. It must be added, however, that the Saraçhane and Kalenderhane excavations in Constantinople both show a declining trend in the thirteenth century in the total number and value of coins with respect to the twelfth century.¹³⁶ This constitutes an interesting case in which the increase in the number of hoards that have been uncovered is countered by a relative decrease in the actual coin

¹³⁵ There is a good deal of evidence on John III's economically conservative, protective policies. See Chapter 11 below.

¹³⁶ For Kalenderhane the total value is thirty-three billion *trachea* in the twelfth century as opposed to twenty-six billion *trachea* in the thirteenth. The thirteenth-century levels in Saraçhane do not survive in their totality so the difference between the total value of the twelfth-century coins (twenty-eight billion *trachea*) with respect to the thirteenth (ten billion *trachea*) should be observed with caution. M. Hendy, "Roman, Byzantine and Latin Coins," in C. L. Striker and D. Kuban, *Kalenderhane in Istanbul. The Excavations. Final reports on the Archaeological Exploration and Restoration at Kalenderhane Camii 1966-1978*, vol. 2 (New Haven, 1997), 175-276; Hendy, "Coins," in ed. R. Harrison, *Excavations at Saraçhane in Istanbul*, vol. 1 (New Haven, 1986), 278-373 with catalogue.

supply in the thirteenth century. This pattern may contradict my hypothetical explanation above. The size and the overall number of hoarded and excavated coin evidence from Constantinople is too limited to allow further analysis.

The contrast between the twelfth- and thirteenth-century numismatic material, on the one hand, and that of the early fourteenth, on the other, is remarkable. The Palaiologan emperors starting with Andronikos II, Michael VIII's son and successor, issued a Byzantine counterpart (called *basilikon*) to the Venetian *grosso* (ninety-eight percent silver) and to the Frankish *tournois* with its 15-20 percent silver content.¹³⁷ The total number of Byzantine coins hoarded in the fourteenth century drops below the thirteenth-century levels, which may be a sign of general mistrust in their reliability, but also of the impact of the Black Death which struck the city in 1347.¹³⁸ It is also worth noting that the fourteenth-century coins are quite rare finds in excavations.

¹³⁷ Grierson, *Catalogue*, 5.1, 50-51. The *hyperpyron* was worth twelve *grossi*. The rate between the *grosso* and the *denier tournois* was 1:6; sterling-*denier tournois* rate, on the other hand, was 1:4. On these rates see, Stahl, "European Coinage in Greece after the Fourth Crusade," *Mediterranean Historical Review* 4.2 (1989), 358; *idem.*, *The Venetian Tornosello. A Medieval Colonial Coinage* (New York, 1985), 53ff.

¹³⁸ See, Grierson, *Catalogue*, 5.1., for a list of hoards and their content on pp. 12-14. The most important coins of the "opening years of the Palaiologan period" were the *grosso* and the billon *tournois* of Frankish Greece which would cede their favored position to *florin* and the *gigliato* in the fourteenth century. *Ibid.*, 33.

Table 1. 8. Exchange rates between Hyperpyron, Grosso, Sterling and Denier Tournois¹³⁹

<i>ELECTRUM</i> <i>Hyperpyron</i>	<i>SILVER</i> <i>Grosso</i>	<i>BILLON</i> <i>Sterling</i>	<i>BILLON</i> <i>Aspron Trachy</i> <i>(Stamenon)</i>	<i>BILLON</i> <i>Denier Tournois</i>
1	12	18	48/60 ¹⁴⁰	72
	1	1.5	4/5	6
		1	2.6/3.3	4

The unity of the Komnenian monetary system with its privy marks as well as the consistency of the die epigraphy and the die iconography was—in that specific sense—completely lost after 1204. Numismatists do not dispute that the Latin Empire issued imitations of twelfth-century Byzantine coins, especially the billon *trachea* of Manuel I, but also of the later Komnenoi and Angeloi.¹⁴¹ Centered on the work of Michael Hendy and John Touratsoglou, the debate focuses on the so-called “Bulgarian” imitations: Hendy calls them such because he claims that the geographical distribution of these coins renders them a “Balkan and not an Anatolian or Constantinopolitan

¹³⁹ See n. 137 above.

¹⁴⁰ Before 1204 forty-eight, after 1204 sixty times less the nominal value of a *hyperpyron*.

¹⁴¹ See Hendy, *Catalogue*, 4. 2, 653-668 for the latest sequencing of the coin series issued by the Latin empire.

phenomenon.”¹⁴² Touratsoglou, on the other hand, I believe rightly, terms the same group “loyal” or “direct” imitations and attributes them to the Latin Empire, arguing that they were the first issues of the Latin emperors in Constantinople before they began issuing the “Latin” imitations. The main reason for Touratsoglou’s claim is that these coins are found relatively frequently in Constantinople and Anatolia, as well as the Aegean islands. The geographical extent of the “Bulgarian”/loyal imitation coins is, therefore, in fact not limited to the Balkans.¹⁴³ Furthermore, in Jordanov’s study of 204 hoards from Bulgaria, the compelling presence of imitations issued by the Latin Empire cannot be ignored, as in some of the hoards they actually exceed the number of the “Bulgarian”/loyal imitations. This would suggest that the Bulgarian state did not depend on the supposed “Bulgarian” imitations alone for its coin supply. It is therefore unlikely that the issuing authority behind “Bulgarian”/loyal imitations were the Bulgarian rulers. It is, on the other hand, clear that Bulgaria had a good number of

¹⁴² Hendy, *Catalogue*, 4. 1, 69-70.

¹⁴³ Touratsoglou, “The Edessa/ 1968 Hoard of Billon Trachea,” *AD* 28.1 (1973), 64-70; *idem.*, “La monnaie byzantine aux XIIe-XIIIe siècles et le témoignage des trouvailles de Grèce: à propos d’un ouvrage récent,” *RN* 6 158 (2002), 385-404. Summary of the debate is in Metcalf, “The Value of the Amorgos and Thira Hoards as a Test Case for the Interpretation of Sub-Byzantine Trachea in the Years around 1204,” *Nomismatika Chronika* 8 (1989), 49-59; Also see M. Caramessini-Oeconomides, “Contribution à l’étude de la circulation des monnaies byzantines en Grèce au XIIIe siècle,” in *Actes du XVe congrès international d’études byzantines* 2.A (Athens, 1981), 121-128; Metcalf, on the other hand, thinks they were issued by the Byzantines themselves, i.e. the Nicaeans: Metcalf, “Byzantinobulgarica: the Second Bulgarian Empire and the Problem of the ‘Bulgarian Imitative’ Trachea before and after 1204,” *NCirc* 81.11 (1973), 418-421; Metcalf and O’Hara, “A Hoard of Trachea from the Reign of Theodore I of Nicaea, 1204-1222,” *NCirc* 85 (1977), 103-106.

hoards consisting of both types of imitative coinage. Furthermore, the “Bulgarian” imitations were not overwhelmingly predominant in the Balkans.¹⁴⁴

There are further unresolved questions regarding the identification of the imitative coins circulating in the thirteenth century. For example, the issuing authority behind the small module (with smaller circumference) “Latin” imitations is not known: Hendy argues that it was a Venetian enterprise, while Touratsoglou thinks they were issues of, again, the Latin emperors in Constantinople.¹⁴⁵ It is quite likely that the debate will continue, while new attributions of imitative coins will appear, such as the *perperi latini*, which are now accepted to be imitations of type B *hyperpyra* minted under John III Vatatzes (1221-1254).¹⁴⁶

It is, however, worth underscoring that the 1219 agreement between Theodore I and the Venetians, which banned both parties from imitating coins of the other, suggests that the Venetians were perceived as being responsible for imitating Byzantine coins. For this reason, it is probable that, as Hendy points out, the Venetians indeed produced the small module versions of the so-called Latin imitations of Byzantine billon

¹⁴⁴ I. Jordanov, *Moneti i monetno obrüştenie v srednovekovna Bulgaria, 1081-1261* (Sofia, 1984), 122-227. Mesembria produced twenty Latin imitations and only three direct copies of which the majority were small module imitations, types A to G. The city was seized by the Venetians in 1257. See, E. Theoklieva-Stoytcheva, *Medieval Coins from Mesembria* (Sofia, 2001), 31-32.

¹⁴⁵ Hendy, *Catalogue*, 4. 2, 670-672; Touratsoglou, “La monnaie byzantine aux XIIe-XIIIe siècles.”

¹⁴⁶ E. Oberlander-Tarnoveanu, “Les hyperpères de type Jean Vatatzes III-Classification, chronologie et l’évolution du titre (à la lumière du trésor d’Uzun Bair),” *Istro-Pontica* (2000), 499-561, especially, 500-510.

trachea.¹⁴⁷ Thirteen small module billon *trachea* imitations were found at the Pergamon excavations,¹⁴⁸ the Nicaea and Bursa hoards both have seven of these coin types.¹⁴⁹ The presence of these imitative coins and the relative absence of European coinage in the state of Nicaea further suggest that the Nicaean government maintained a heavy control over coinage circulating in its territory. The 1219 agreement between Jacopo Tiepolo, doge of Venice, and Theodore I Laskaris, explicitly states that neither the Venetians nor the Nicaeans are permitted to issue gold *hyperpyra*, electrum *trachea* or billon *trachea* “in the identical form of the other party’s [coins].”¹⁵⁰ There is no explicit, written evidence that would allow us to argue for Nicaea’s reminting of the Venetian or other foreign coins before allowing them to re-enter its territories.¹⁵¹ But the above provision could target Venetian imitations (of Nicaean coins), which could potentially enter and circulate undetected.

Furthermore, archaeological evidence suggests that the Palaiologoi stopped controlling the influx of foreign issues after the middle of the thirteenth century, as we

¹⁴⁷ See n. 145 above.

¹⁴⁸ Voegtli, *Die Fundmünzen aus der Stadtgrabung von Pergamon* (Berlin, 1993), 63.

¹⁴⁹ Metcalf, “A Hoard of Billon Trachea from the Empire of Nicaea, c. 1215-1220,” in *Hamburger Beiträge zur Numismatik* 30-32 (1978), 65; Hendy, “Seventeen Twelfth and Thirteenth Century Byzantine Hoards,” *Coin Hoards VI* (1981), 66-67.

¹⁵⁰ “...nec Imperium meum, neque tuus dispotatus habeat licentiam formare yperperos, vel manuelatos, aut stamena equalis forme alterius partis.” *TTh* II, 207.

¹⁵¹ For a detailed discussion of this treaty see Hendy, *Catalogue*, 4. 2, 582, 671.

do see foreign issues in western Asia Minor after ca. 1250. All together the evidence suggests that, if indeed the Nicaeans tightly regulated coin circulation, they, or more likely, their successors, the Palaiologoi stopped doing so after the middle of the thirteenth century when we see evidence of foreign issues in western Asia Minor. The relatively small number of foreign issues found on Nicaean territories, in light of the written evidence, suggests that the Nicaean state controlled the influx of these coins. As we will see in Part 2 and Part 3 below, Nicaean rulers seem to have extended restrictions to foreign fine ceramics and fine textile imports as well. In other words, the Nicaean rulers had a currency policy that coheres well with the evidence deriving from ceramics and fine textiles.

Strict regulation of the circulating medium under the Nicaean rulers, especially John III, is based on the evidence from hoards and evidence from excavated sites that pertain to the thirteenth century, and during that period, specifically to the areas under control of the Nicaean state. It is worth mentioning also that strict control of the monetary economy does not mean that the Nicaeans were not engaged in trade with their neighbors; it only suggests to us that they were interested in closely monitoring and controlling their economic relationships with the newly formed polities in the Aegean, the Latin Empire and the Latin principalities in southern Greece in particular.

No matter how we look at coin circulation in the twelfth and the thirteenth centuries, 1204 constitutes a watershed specifically in terms of the internal organization of the numismatic system. The poorer metal content and the shoddy appearance of the thirteenth-century issues no doubt facilitated Hendy's masterful distinction of the Komnenian from the Komnenian-inspired thirteenth-century issues.¹⁵² There was also a gradual shift from gold to silver as the predominant metal. However, the regional distinction between western Asia Minor and mainland Greece, both in terms of the total value of coins and the types of denominations circulating in these regions, was already a fact during the Komnenian period. Furthermore, the connection that southern Italy had had with the Peloponnese continued after the eleventh century and, in numismatic terms, became particularly visible once the French rulers started issuing coins there under their own name after the middle of the 1250s. From the point of view of coins circulating on the ground, the more significant watershed, then, was crossed ca. 1250, when the political mechanisms which were responsible for the regional differences between Asia Minor and Greece were not likely able to sustain these differences any longer. It is around the mid-thirteenth century that all the polities in the Aegean basin and beyond, including Bulgaria and Serbia, start minting coins in their own name.¹⁵³ A

¹⁵² Hendy, *Coinage and Money*, 191-222.

¹⁵³ Hendy, *Catalogue*, 4. 2, 635-650. The Bulgarians and Serbians both began minting coins in their own name around 1230.

new monetary system was being born, when Byzantine (Palaiologan) coins were no longer worth imitating, but without doubt, the Venetian and the Angevin coins were.¹⁵⁴

Thus, I argue that from the perspective of variations between Greece and Asia Minor in terms of coin circulation patterns and overall wealth, the beginning of what later constituted a drastic decline for the Byzantine coins of the post-1092 reform period was not the Fourth Crusade. True enough, 1204 broke the unity of the Komnenian monetary system but not the regional dynamics within it.¹⁵⁵ Even though the Byzantine coinage remained as the unit of account for at least a century following the capture of the Byzantine capital, Byzantine issues no longer served as the primary unit of exchange in mainland Greece, especially in southern Greece. It is important to note that neither hoards nor excavations conducted in southern Greece reveal significant numbers of fourteenth-century Palaiologan coins;¹⁵⁶ all of the evidence for such coins comes from northern Greece, the Balkans and western Asia Minor—the areas that still

¹⁵⁴ Grierson, “The Fineness of the Venetian Ducat and its Imitations,” in *Metallurgy in Numismatics* vol. 2 ed. W. A. Oddy (London, 1988), 95-105 where he argues that the so-called *ducati turchi* were in fact Genoese imitations of Venetian coins minted in Mitylene between 1355 and 1357; See, K. Fleet, *European and Islamic Trade in the Early Ottoman State* (Cambridge, 1999), 14-15 for evidence on Turkish rulers striking Venetian *ducats* and *gigliati*.

¹⁵⁵ About which regional dynamics much remains to be understood. See the latest views in Papadopoulou, “De l’unité à l’éclatement.”

¹⁵⁶ Five *follari* of Manuel II found in Athens are exceptional in this regard. See Baker, “Coin Circulation in Early Fourteenth Century Thessaly and South-Eastern Mainland Greece,” in N. G. Moschonas, ed., *Money and Markets in the Palaeologan Era* (Athens, 2003), 302.

remained under Byzantine rule.¹⁵⁷ The archaeological evidence demonstrates that there were further regional divisions. Mainland Greece, but especially the regions south of Thessaly and Epiros, that is, the Peloponnese, Boiotia and Euboea, started minting coins of their own in the second half of the thirteenth century under Frankish rulers. These Frankish *deniers* seem to have replaced the Byzantine coins altogether. One indication of this development is the fact that at the beginning of the fourteenth century, when Venice started issuing coins tailored for its colonies in the Aegean, it took the Frankish *denier* as the measuring yard.¹⁵⁸

If we turn to written evidence, the picture becomes more complicated: according to the evidence from the Greek and Latin sources, throughout the thirteenth century, irrespective of region, the *hyperpyron* is mentioned as the unit of account. By way of example, all the Venetian and western trading contracts that pertain to the area called Romania (a term with many meanings designating both the Byzantine Empire and ex-Byzantine lands, and also sometimes specifically the Latin Empire of Constantinople, or the Venetian possessions in Romania), are computed in “perperi.” It seems, then, that the *hyperpyron* was used as the unit of account, to standardize the different values of coins that were actually circulating at the time. Among these coins, the *denier tournois* was the most important in the thirteenth century, especially its latter half.

¹⁵⁷ Grierson, *Catalogue*, 5. 2, 12 (for excavations) and 13-19 (for hoards).

¹⁵⁸ Stahl, “European Coinage in Greece,” 358.

Conclusions

In this chapter we have looked at the hoard evidence and discussed an alternative reading of the hoards, namely, that especially if, as I assumed, population figures and socio-political stability of Greece and western Asia Minor were comparable, then Greece seems to have accumulated more wealth during both the twelfth and the thirteenth centuries compared to western Asia Minor. Nevertheless, just by studying the overall values of hoarded coins in western Asia Minor western Asia Minor produced twenty-one more times the value produced in the hoards from the same area that survived from the previous century. This large difference in the overall value of hoarded coins in the thirteenth century may be interpreted, as I proposed in this chapter, as a reliable indicator of a real change in economic value created in western Asia Minor during the thirteenth century. In the next chapter, I will analyze the excavation reports and see that a similar picture emerges from a few of the sizeable excavations conducted on either side of the Aegean. Furthermore, the discussion of fine ceramic and textile evidence in Part 2 and Part 3 also support my interpretation regarding an increase in the economic wealth produced in western Asia Minor under Nicaean rule during the thirteenth century.

In this chapter we have also made an important contribution by studying the content of the surviving thirteenth-century hoards from both Greece and western Asia

Minor and we have observed that in approximately a third of the thirteenth-century hoards with a *t. p. q.* of 1221, the ratio of twelfth-century coins is approximately 24.5 percent. By contrast, in the five thirteenth-century hoards with a *t. p. q.* of 1260 the ratio of twelfth-century coins is less than approximately twenty-five percent. In approximately half of all of the thirteenth-century hoards I studied, the ratio of twelfth-century coins was less than ten percent. This shows that twelfth-century coins were hoarded in the thirteenth century and the figures are as stated above based on the surviving hoards: in approximately eighty percent of all thirteenth century hoards, twelfth-century coins constituted less than twenty-five percent of the total.

Another observation concerning western Asia Minor compared to Greece concerns the non-Byzantine-coin content of the surviving hoard evidence. Even though foreign coins were available, valued and thus hoarded in Greece especially during the second half of the thirteenth century, hoarded material in western Asia Minor does not bear any signs of these foreign coins. A more conclusive discussion of this evidence will be made in the next chapter, where I discuss coin evidence from excavations. I have nevertheless suggested here that the variation between Greece and western Asia Minor, in terms of the absence of foreign issues in this region, might have been caused by the economic regulations of the Nicaean rulers which seem to have restricted the circulation of foreign issues in their state.

My overarching argument in this chapter was that the internal dynamics of the twelfth-century Komnenian monetary system, which had either created regional differences between western Asia Minor and Greece, or responded to an already existing variation between the two regions, changed by the second half of the thirteenth century, when Greece was still wealthier than western Asia Minor. The stride western Asia Minor seems to have made to close the gap with Greece in the thirteenth century is nevertheless remarkable. In the next chapter, we will cast a closer look at excavation reports and discuss whether or not coin finds from excavations supplement our main observations based on hoarded coins.

CHAPTER 3 Excavations from Greece and Asia Minor

Analysis of the Numismatic Evidence from Excavations in Greece

Mindful of the complex mechanisms at work and the difficulty of interpreting coin evidence, I aim to accomplish two things in the remaining chapter: first to present the numismatic evidence derived from archaeological investigations, and second, to discuss briefly the possible economic meaning(s) of the emerging picture. With these interrelated goals in mind, I organize the remaining part of this part from west to east and start with a presentation of the coin finds from evidence from Greece before turning to the evidence from western Asia Minor.

In evaluating the evidence from single coin finds that come mostly from excavations, it is important to pay attention to the denominations of the coins and the period when they were in circulation. Finds from western Asia Minor stand out in two regards: the *tetarteron* and its half are almost non-existent from the excavations there in both the twelfth and the thirteenth centuries;¹⁵⁹ the lowest denomination in Asia Minor

¹⁵⁹ This observation is particularly important: because lower denominations are more prone to loss, excavations tend to produce more of these denominations while hoards usually tend to consist of higher denominations that carry valuable metal content. For an evaluation of the disparity between written and archaeological evidence (that is, numismatic evidence from excavations and hoards) in the context of thirteenth century Epiros, see Laiou, "Use and Circulation of Coins in the Despotate of Epiros," *DOP* 55 (2001), 207-215. The least frequent in hoards and excavations are the electrum *trachea* even though this denomination is mentioned fairly frequently in the Epirote sources. Laiou attributes this discrepancy to this coin's low thesaurization and low frequency-of-loss rates. The electrum *trachea* are hard to come by in excavations and hoards in Asia Minor and Greece as well, which shows that this phenomenon is not limited to Epiros. The billon *trachy* is the most commonly hoarded coin and the most commonly excavated coin except for in Corinth and Athens where *tetartera* are more common. The electrum *trachea*

—as has been noted above—is the billon *trachy*. Western Asia Minor differs out also in terms of the circulation of western issues. Unlike the evidence from Greece, western coinage —both the imports from France and England in the first half of the thirteenth century and the local Frankish coins issued thereafter—enters Asia Minor’s archaeological record only after the middle of the thirteenth century. Concerning coin circulation in Greece and Asia Minor these questions remain of interest: 1) Was the smallest denomination, the *tetarteron* and its half, not circulating in Asia Minor even under the Komnenian rulers, because of the stipulations of the Komnenians, as is argued by Papadopoulou?¹⁶⁰ 2) How do we interpret, in economic terms, the regional variations between Greece and western Asia Minor that are apparent in the aggregate numbers of surviving coin hoards, their total values, and the coins excavated in these two areas? Since Papadopoulou has already dedicated a thesis to the first question, I will not dwell on it but we should note here that the two regions seem also to differ by the circulating denominations.

and *hyperpyra* are interestingly rarer among hoarded coins—another phenomenon not limited to Epiros but is common also in Greece and Asia Minor overall. Both of these denominations were about 30mm in diameter and weighed about 4-4.5 grams. Billon *trachea* are smaller in diameter but usually less heavy so the rarity of the electrum *trachea* and the *hyperpyra* cannot reliably be ascribed to a greater difficulty of recovery.

¹⁶⁰ Papadopoulou, “De l’unité à l’éclatement.” Both Hendy and Grierson refer to regional differences in terms of the dissemination of the denominations. Hendy, *Coinage and Money*, 311; Grierson terms the regional variations in the circulation of particularly the smaller denominations as “the backbone of the Komnenian system.” Grierson, *Byzantine Coins*, 219.

The purpose of this chapter is to discern the picture of monetary circulation on the basis of stray finds acquired in excavations. Excavations tend to give a better sense than hoards of monetization of the economy, coin availability, and circulation at a given site. Monetization level of an economy, in turn, could be an indicator of the monetized wealth available in a given site. In this chapter we will study the variations in the level of monetization between Greece and Asia Minor across the two centuries under investigation. The results are telling because not only was Asia Minor able to hoard more value in the thirteenth century; its economy seems to have better monetized in that century than previously. In Greece, on the other hand, there may have been a decline from the highly monetized economy of the twelfth century during the first half of the thirteenth century. Furthermore, there seems to have been more money circulating on the ground in Greece in the second half of the thirteenth century compared to the first half of the same century.

Excavations in Greece: Athens, Corinth and Nemea.

For Greece, I will begin with some of the best and most compellingly documented excavations, the numismatic evidence from the Athenian agora and the Corinth excavations. Athens was lost to the Byzantines after 1204. Between 1311 and 1456, when it was taken by the Turks, the city was ruled in succession by the Catalan Company, the Acciaiuoli, and briefly by Venice. This history left its mark on local coin

circulation as is evident from two extensive reports published in 1935 and 1954 respectively which were considered exemplary in their day.¹⁶¹ If the results from all of the reports are put together, the overwhelming presence of the Komnenian issues in the city becomes immediately obvious. There are a total of 954 coins issued under Alexios I (all –except four *hyperpyra*– are *tetartera* and billon *trachea*), 144 under John II (*tetartera* and billon *trachea*), 3,775 of Manuel I (*tetartera*, half *tetartera* and billon *trachea*) and seventy-eight from the relatively short reign of Andronikos I (*tetartera* and billon *trachea*). The post-1204 Byzantine presence is minimal; there are only two coins from the reign of Andronikos II (1282-1328).¹⁶² The coins issued by the Byzantine rulers in Nicaea too have only a humble presence. Nevertheless, the reigns of Theodore I, John I, and Theodore II at least find representation via a single coin each.¹⁶³ Also noteworthy are the five coins from the reign of Theodore I of Thessalonike (1222-1230) and the single issue by Alexios III of Trebizond (1349-1390).¹⁶⁴ In stark contrast, there are 1,186 Frankish *deniers* starting with the reign of William II Villehardouin (1245/46-1278), a total of 1,024 Venetian issues with issuer regal dates extending from 1229 to 1700 A.D. –of which only fifteen are from 1229 to 1339 (but note that there are also 229 unclassified Venetian

¹⁶¹ J. Shear, “The American Excavations in the Athenian Agora: Ninth Report,” *Hesperia* 5. 1, (1936), 123-150; M. Thompson, *The Athenian Agora. Vol. II Coins* (Princeton, 1954). The latter includes the information printed in the former.

¹⁶² Thompson, 75.

¹⁶³ *Ibid.*

¹⁶⁴ *Ibid.*, 75-76.

coins)—as well as many single issue coins mainly of western origin including eleven unidentified coins from “Western Europe.” The most curious aspect of the distribution of these coins concerns the transition period from the fall of Constantinople to the beginning of the local Frankish coins first issued after the middle of the thirteenth century. There appear to be close to 6,000 coins issued under Byzantine rulers of the twelfth century, among which a mere twenty-one are labeled thirteenth-century imitations;¹⁶⁵ in contrast, there are about 530 coins from the thirteenth century. Of the 530, the bulk (452) were issued under William II of Villehardouin. There also are fifty-three coins of Guy de la Roche of Athens (1225-1263),¹⁶⁶ seven French *denier tournois* (six of Louis IX), four Venetian *grossi*—two of Jacopo Tiepolo (1229-1249) and one of Ranieri Zeno (1253-1268)—and a single billon coin of Thomas II of Salona (1212-1258).¹⁶⁷ Overall, the remarkably high number of twelfth-century Komnenian issues compared to the post-conquest Frankish *tournois*, the Venetian *grossi* and the *ducat*,¹⁶⁸ may to some degree reflect the possible error in attributing the imitative coins of the Latin Empire of

¹⁶⁵ In total unclassified Byzantine material from the twelfth century amounts to 801 (with one imitation). *Ibid.*, 76. V. Penna attributes the lack of Latin imitations to lesser Venetian influence in Athens. See V. Penna, “Βυζαντινό νόμισμα και Λατινικές απομιμήσεις,” in *Τεχνογνωσία στη Λατινοκρατούμενη Ελλάδα* (Athens, 2000), 13-14.

¹⁶⁶ That the number of the coins of the dukes of Athens is fewer compared to that of the coins of the rulers of Achaia is somewhat interesting. Guy de la Roche’s issues are from Thebes, the capital of the Duchy.

¹⁶⁷ *Ibid.*, 76-80.

¹⁶⁸ There is only one ducat from the end of the seventeenth century. *Ibid.*, 81.

Constantinople to twelfth-century Komnenian rulers.¹⁶⁹ There is unfortunately no way at present to disassociate the thirteenth-century imitations from their Komnenian counterparts. Thus, the data I am presenting, to some small degree, gives possibly reduced values for the thirteenth century. The difference must be minor, however, because the most visible denomination in the twelfth-century layers in Athens excavations, the *tetarteron* (and its half), was produced and/or imitated in exceedingly small numbers by polities on the other side of the Aegean in the thirteenth century.¹⁷⁰ Furthermore, the thirteenth-century imitative billon *trachea*, because they were not locally minted, would have been imported to southern Greece and hence their availability in the thirteenth century must have been low.

Overall, in Athens the drastic decline in the number of thirteenth-century issues is followed by a partial recovery in the middle of the same century when the local *denier* issues began. To the 452 *deniers* minted under William II Villehardouin, we should add the 193 *deniers* issued by the dukes of Athens during the second half of the thirteenth century and in the fourteenth century. A total of seventy-seven coins minted in the first half of the thirteenth century—most of which are imports—contrast drastically with over six hundred Frankish *deniers* minted—most of them locally—in the second half of

¹⁶⁹ For this reason I have not included this otherwise very important data in my hoard database. Both reports predate Michael Hendy's *Coinage and Money* published in 1969. The Latin rulers are not known to have issued *hyperpyra* but only billon *trachea* and *tetartera* together with its half.

¹⁷⁰ Hendy, *Catalogue*, vol. 4, 2, 662.

the thirteenth century. It is therefore pretty clear that the middle of the thirteenth century constituted a turning point for Athens. During the first half of the thirteenth century, on the other hand, the city was likely supplied with residual twelfth-century Komnenian issues, thirteenth-century Latin imitations, as well as the imported coins brought in by the conquerors. This situation probably continued up until the middle of the thirteenth century when the local authorities began issuing their own silver Frankish *deniers*. In numismatic terms, the first half of the thirteenth century was a period of adaptation when possibly the regional and non-local imports formed the backbone of the coin circulation on the ground. To put it in general terms, numismatic evidence suggests that it took about half a century for Athens to regain a sturdy monetary basis for a well-supplied, well-monetized economy.

That said, if we look at the approximate total values of the thirteenth-century coins with respect to the twelfth, we will notice that Athens produced more value in archaeologically recovered coins in the thirteenth century (about 1,600 billion *trachea*) than in the twelfth (about 400 billion *trachea*) as almost all of the coins surviving from the twelfth century are copper *tetartera* while most of those that survive from the thirteenth century, are silver *deniers*.

Table 1. 9. Coins and their Values in Athens

Athens	Total Number of Coins	Total Value of Coins (in b. <i>trachea</i>)
12 th Century	6,000	400
13 th Century	600	1,600

Turning from Athens to Corinth, the overwhelming presence of the twelfth-century Byzantine coins is also noted by Edwards who published the second monograph on the coin finds from the Corinthian excavations, where she writes that “more than half the total number found in the excavations are Byzantine, and of these a majority come from the time of Alexius I, John II, and Manuel I, whose coins add up to the large number of 1,500.”¹⁷¹ In both her and Bellinger’s examination (published as the first monograph) of the Corinthian evidence there are no coins identified as the Latin imitations issued after 1204 in Constantinople and Thessalonike. This makes it highly likely that these collections of numismatic evidence from the excavations conducted between 1896 and 1929, including those from three hoards, misidentify as authentic coins some of the imitative (Latin or loyal/ “Bulgarian”) issues of the Komnenian rulers. The later reports from Corinth by Williams and Zervos do refer to Latin and loyal/ “Bulgarian” imitations, yet we do not know how different the proportions would be if

¹⁷¹ K. Edwards, *Corinth VI Coins 1896-1923* (Cambridge M.A., 1933), 11. James Dengate makes the same observations about the ratio of the twelfth-century Byzantine issues in the general mix, which undergoes drastic change, for obvious political reasons, in the thirteenth century: J. Dengate, “Coin Hoards from the Gymnasium Area at Corinth,” *Hesperia* 50. 2 (1981), 147-188. The first monograph on Corinth was published in 1930: A. Bellinger, *Catalogue of the Coins found at Corinth, 1925* (New Haven, 1930).

all of the coins were correctly identified.¹⁷² Overwhelmingly, the twelfth-century coins from the Corinthian and Athenian excavations are copper *tetartera* and half *tetartera*. The Latin emperors in Constantinople, the Nicaean and the Epirote states are the only polities that issued these two denominations during the thirteenth century, and did so in very small amounts. Thus the difference caused by the misidentifications must be minor, because the most visible denomination in the twelfth-century layers in Corinth excavations, the *tetarteron* (and its half), was produced and/or imitated in exceedingly small numbers by polities on the other side of the Aegean in the thirteenth century.¹⁷³ Furthermore, the thirteenth-century imitative billon *trachea*, because they were not locally minted, would have to have been imported to southern Greece and hence their availability at Corinth in the thirteenth century must have been low.

Overall, the Byzantine numismatic evidence from Corinth consists almost completely of copper coins. The total number of gold and billon coins does not exceed more than ten single finds from all of the reports combined. Western coinage, of course, is silver based, except for the Latin imitations of twelfth-century Byzantine coins. Including Edwards' and Bellinger's study there are in total six reports on coins from

¹⁷² At the moment there is unfortunately no way of knowing the exact proportion unless they are studied again.

¹⁷³ Hendy, *Catalogue*, vol. 4, 2, 662.

Corinth published between 1939 and 1997.¹⁷⁴ As one can gather from these reports, there are altogether 1,113 coins of Alexios I, 144 of John II, 1,626 of Manuel I, twenty of Andronikos I, thirty two of Isaac II, thirty of Alexios III. The coins from the Despotate of Epiros dating from roughly 1230s to 1246 find representation with only five issues. The only reference to the coins of the Nicaean rulers (eighteen in total, of which four are gold coins) found in Corinth come from Edwards' catalogue; the later reports do not mention any other coins from the Greek state of western Asia Minor.¹⁷⁵

The reports on the coin finds from both Athens and Corinth unfortunately lack any serious attempt to distinguish aggregate coin numbers divided by the period within which they circulated. In the Corinth reports, for example, even though the lot numbers are given for each coin find, this is not followed by any discussion of the coin in relation to other coins from the same and neighboring lots. Therefore, the temporal relationship and/or the sequence among coins and their contexts are overall unclear. Regardless, mindful of the pitfalls outlined above, I will attempt to make an overall evaluation of this sequence, trying to assess the monetary circulation between 1204 and the 1260s following which the minting of local *denier tournois* began.

¹⁷⁴ C. K. Williams II and O. H. Zervos, "Corinth, 1982: East of the Theater," *Hesperia* 52. 1 (1983), 1-47; Williams and Zervos, "Frankish Corinth: 1993," *Hesperia* 63. 1(1994), 1-56; Williams and Zervos, "Frankish Corinth 1994," *Hesperia* 64.1 (1995), 1-60; Zervos, "Frankish Corinth, 1996: The Coins," *Hesperia* 66. 2 (1997), 173-192.

¹⁷⁵ Edwards, *Corinth Coins*, 149-150.

Hence, it is still possible to make a few observations about the circulation of coins in Corinth during the first half of the thirteenth century by looking at the coins that were issued during that period and were found as single stray finds. In addition to the thirty billon *trachea* of Alexios III, from all six reports, we have references to five coins issued under the rulers of Epiros, eighty-eight instances of ca. pre-1250 imported French *denier tournois*, and approximately forty issues of the Duchy of Athens issued during the first half of the thirteenth century. In addition to these coins, only six English short cross sterlings are mentioned. Of the coins issued during the thirteenth century, the French *denier tournois* have the highest proportion (eighty-eight), followed by the coins issued under the dukes of Athens, the Latin and to a lesser degree loyal/ “Bulgarian” imitations, and finally the *hyperpyra* as well as the *tetartera* and billon *trachea* from the Nicaean state. The Venetian (five), English (six) and Epirote (five) issues are rather small. Thus, until William II Villehardouin began minting coins after the middle of the thirteenth century, coin availability in Corinth seems to have been reduced and the city seems to have needed to import French coinage for its monetary supply.

Table 1. 10. Total Number and Value of Twelfth- and Thirteenth-Century Issues in Corinth

Corinth	Total Number of Coins	Value of Coins (in b. <i>trachea</i>)
12 th Century	3,000	150
13 th Century	770	1,600

When William II began issuing his *denier tournois* from mints in Corinth and later Clarentza, the numbers increased remarkably, as there are 588 references to “Frankish” *deniers tournois* from the second half of the thirteenth and early fourteenth century. The Venetian numismatic presence in the city too seems to have revived after the middle of the thirteenth century as there are sixty-six references to *grossi* issued by doges who took office after ca. 1250 as opposed to only three *grossi* of Jacopo Tiepolo (1229-1249). Apparently, this trend is valid for the Venetian numismatic presence in the East in general: there are no hoards of *grossi* buried in Greece before 1253;¹⁷⁶ but in general, the *grossi* appear fairly consistently in hoards and excavations until the end of the thirteenth century, after the 1230s and the 1240s,¹⁷⁷ and after the 1240s further east.¹⁷⁸ Touratsoglou and Baker’s relatively recent study of hoards of Greek provenance also support Stahl’s observations. The low amount of *grossi* from the first half of the thirteenth century is noteworthy. This trend alters in the latter half of the thirteenth century when both the

¹⁷⁶ Stahl, “Coinage and Money,” 205.

¹⁷⁷ Stahl, “Venetian Coinage in Medieval Greece,” in *Économies Méditerranéennes Équilibres et intercommunications XIIIe-XIXe siècles* vol. 1 (Athens, 1985), 367-368.

¹⁷⁸ Stahl, “The Circulation of Medieval Venetian Coinages,” in *Moneta locale, Moneta Straniera: Italia ed Europa XI-XV secolo. The Second Cambridge Numismatic Symposium. Local Coins, Foreign Coins: Italy and Europe 11th – 15th centuries* (Milan, 1999), 92. Also see Appendix 2 Table B 2 in *idem.*, *Zecca. The Mint of Venice in the Middle Ages* (New York, 2000).

grosso and the *denier tournois* may have compensated for the scarcity of coinage in the area.¹⁷⁹

If we shift our attention from the count of the total number of coins to their value, however, the result is not unlike that of Athens. In Corinth too the total value of the thirteenth-century issues is higher than the value of the twelfth-century issues. In fact, the thirteenth-century silver *deniers* yield about ten times more than the total value of the *tetartera* of the previous century. And since the local issues of the silver *deniers* were minted after the middle of the thirteenth century, and because their proportions were much higher *vis-à-vis* the imported French *tournois* (588/88), most of the upward trend in terms of the thirteenth-century coin output dates from the second half of that century.

¹⁷⁹ Touratsoglou and J. Baker "Byzantium of the Venetians Greece of the Grossi," in eds. C. Maltezou, P. Schreiner *Bisanzio, Venezia e il mondo Franco-Greco (XIII-XV secolo)* (Venice, 2002), 208-209. The authors study a total of twenty nine hoards of known provenances across Greece. They note that in the first half of the thirteenth century, Venetian *grossi* played a significant role in areas deficient of good coinage or sufficiently large quantities of any coinage. They identify these areas as Crete, Epiros and present day Albania. In the latter half of the thirteenth century, on the other hand, the monetary situation deteriorated in the entire Greek mainland but southern Greece was hit especially hard: Byzantine coinage becomes almost extinct in especially southern Greece after the reign of Michael VIII. *Ibid.*, 219-222. For an earlier study on only *grossi* hoards from Greece see M. Galane-Krikou, "Συμβολή στην κυκλοφορία βενετικών γρόσσι ΙΓ' - ΙΔ' Αι. στον ελληνικό χώρο," *AAA* 21 (1988), 163-183. Macedonia and Thrace show some similarities with Asia Minor; few pre- 1250 *grossi* are recorded from hoards from these two regions. Twenty-seven Venetian *grossi* were found during the Redina (75km northeast of Thessalonike) excavations, issues extending from Jacopo Tiepolo (1229-1249) to Francesco Dandolo (1329-1339). See Galane-Krikou and E. Tsourte, "Μακεδονική Πεντίνα. Η νομισματική μαρτυρία (ανάσκαφες 1976-1996)," in *Το νόμισμα στο μακεδονικό χώρο* (Thessalonike, 2000), 352-354.

Table 1. 11. Total Number of Coins in the First and the Second Half of the Thirteenth Century in Athens and Corinth

Number of Coins in	First Half of the Thirteenth Century	Second Half of the Thirteenth Century
Athens	77	600
Corinth	120	650

The proportion of the local and imported coins in Corinth, as well as their total value, is similar to the well-studied and documented site of **Nemea**, about 30 km south west of Corinth. Corinthian copper issues of William II Villehardouin are few and Metcalf thinks that they date from the 1240s.¹⁸⁰ In Nemea too, as in Corinth and Athens, all of the twelfth-century Komnenian issues are the copper *tetartera* and its half (510 in total) except one billon *trachy* issued under Manuel I. An unfortunate similarity of Nemea to Corinth and Athens, concerns the contexts of its coin finds: about two-thirds of the twelfth- and thirteenth-century issues belong to either “unknown” or “modern” contexts while the twelfth and the thirteenth century contexts are lumped together without disaggregation. At Nemea all of the identifications of thirteenth-century imitations, however, are correct.

At Nemea the thirteenth-century issues are French and Frankish *denier tournois*, English silver sterlings and Venetian *grossi*, plus, one *tornosello* (seventy-two coins

¹⁸⁰ Metcalf thinks that the Frankish coppers were issued before the billon *denier tournois*, specifically in the 1240s: Metcalf, *Coinage of the Crusades and the Latin East* (London, 1995), 251. However, this statement is not conclusive as the *deniers* and the copper coins might have been issued together. Judging by their numbers, on the other hand, one can argue that the copper coins were minted in small numbers—certainly in much reduced amount than the *denier tournois*.

altogether) alongside four Latin imitative billon *trachea*.¹⁸¹ Apart from the latter billon group the earliest issues consist of a single short cross of Henry III (1227-1237) and the six French *denier tournois* of Louis IX.¹⁸² The earliest *grosso* from Nemea, on the other hand, was issued under Jacopo Tiepolo (1229-1249).¹⁸³ Unlike the situation in Corinth and Athens, Nemea excavations produced no evidence of imported coins from the Byzantine successor states of the post-1204 era, as there seems to have been a shift directly from the twelfth-century Komnenian copper issues to thirteenth-century western billon (*denier tournois*) and silver (sterlings first, followed by Venetian *grossi* and *tornoselli*) coins. It is probable, in fact quite likely, that some of the twelfth-century *tetartera* continued to circulate during the thirteenth century. Whatever the actual use of twelfth-century issues during the following century, it is fairly clear that by the time the local *deniers* were being issued after the middle of the thirteenth century, the transition from the twelfth-century Komnenian monetary system to a silver-based western system was complete.

¹⁸¹ Ed. S. Miller, *Excavations at Nemea. The Coins* (Berkeley and Los Angeles, 2005) vol. 3, 183-237.

¹⁸² The *denier tournois* of Louis VIII and IX are difficult to distinguish—in fact, according to Duplessy, they are “impossible” to distinguish—but because Louis VIII ruled only from 1223 to 1226, the coins are usually assigned to the first twenty five years of the reign of Louis IX (1226-1245/50). J. Duplessy, “La datation des *deniers tournois* de Saint Louis,” in *Proceedings of the 9th International Congress of Numismatics, Berne, September 1979*, vol. 2, (Louvain-la-Nueve, 1982), 885–890; Duplessy, *Les monnaies françaises royales de Hugues Capet à Louis XVI (987-1793)*, 2 vols. (Paris, 1988), vol. 1, 77.

¹⁸³ Ed. S. Miller, *Excavations at Nemea*, 233-234. There are six *grossi* in total, the remaining were issued in the second half of the fourteenth century.

Nevertheless, in Nemea, like in Athens and Corinth, the disproportion in the sheer total number of coins issued during the twelfth and the thirteenth century is large enough to note (510:76). In terms of the value of these coins, on the other hand, since nearly all of the twelfth-century issues are *tetartera* and nearly all of the thirteenth-century issues are billon (mostly *denier tournois*), the thirteenth century produces more approximate value in billon *trachea* (slightly less than ten times) than the twelfth.

Table 1. 12. Total Number and Value of Twelfth- and Thirteenth-Century Issues from Nemea

Nemea	Total Number of Coins	Value of Coins (in billon <i>trachea</i>)
12 th Century	510	25
13 th Century	76	200

Overall, for both Athens and Corinth there seems to have been a noteworthy change in the numismatic scene in the decades immediately following the fall of Byzantine rule in the area. In the first half of the thirteenth century, both Corinth and Athens—the former visibly more so than the latter—were primarily supplied by twelfth-century coins (mostly, copper and billon) and their imitations, as well as imported—mainly French—billon coins.¹⁸⁴ In the latter half of the thirteenth century, the local rulers felt the necessity to inject their own issues into the local circulation.

¹⁸⁴ For a discussion of the copper issues of the Frankish rulers see Metcalf, *Coinage of the Crusades*, 241-244, 251. The Corinthian issues were copper while billon coins were issued in Clarentza. See A. Engel and R. Serrure, *Traité de numismatique du moyen âge* vol. 2, (Paris, 1894), 917-918. French and Frankish denier finds abound, especially from the Peloponnese and southern Greece. For Laconia, for example, see R. Janko, "Frankish and French Coins from Ayios Stephanos, Laconia," *BSA* 77(1982), 187-189.

When Frankish principalities began doing so after the middle of the thirteenth century, there is a remarkable rise in the quantities of coins for both Corinth and Athens, especially when the Principality of Achaia and the Duchy of Athens began producing their own *deniers* in relatively significant amounts; nevertheless, their overall number remained far below the levels of the circulation of mostly copper coins issued under the Komnenian rulers of the previous century. With respect to their value, however, the value of coins created in Corinth and Athens continued to rise in the thirteenth century, in exponential levels in the second half of that century.

To what extent this general observation applies to the larger economy within these two important centers of regional and international trade is hard to say. If we look at the value of the coins rather than their total count, however, we will note an increase under the French rulers as all except one of the 510 twelfth-century issues are copper *tetartera*. However, the fact that over ninety-five percent of these coins are smaller denominations, the *tetartera* and the billon *trachea* (and European style silver denominations with approximately twenty percent silver content) may relate to the relative size of the commercial transactions (if so, the size of transactions, as is indicated by their value, is ten times higher in the thirteenth century compared to the twelfth), or perhaps better monetization of the economy during the twelfth century, or simply to a shift in the monetary system from copper to billon (with higher silver content than before) as the lowest denomination.

Estimating commercial contacts through numismatic evidence is even more problematic. In terms of the geographic distribution of the provenance of their coin supply, Athens and Corinth display some direct or indirect but minimal connection with both the Nicaean and the Epirote states, however, it is evident that both Corinth and Athens used French coinage until about the 1250s together with Latin imitations while Venetian and local issues became increasingly noticeable among the finds after the 1250s. The evidence from Nemea, a much smaller and commercially less important site, confirms the above observations. On the other hand, the overall picture from mainland Greece, southern Greece in particular, contrasts sharply with what the numismatic evidence hailing from western Asia Minor suggests in terms of established economic contacts before and after the middle of the thirteenth century. As we will see below, evidence from Asia Minor yielded no significant trace of French, Frankish,¹⁸⁵ English or Venetian coins issued before the middle of the thirteenth century. Their penetration into this area only began, as the evidence suggests, when the Palaiologan dynasty came to rule the Byzantine state in the late 1250s.

Excavations from Corinth, Athens, and Nemea also suggest an increase in the coin supply and possibly also circulation in these sites only after the first half of the thirteenth century, based on the sheer number of coins issued during the second half of that century. While this was the case in these sites in Greece, as we will see in further

¹⁸⁵ Frankish copper coins were the only probability so far.

detail below, during the first half of the thirteenth century Asia Minor seems much better supplied than in the century's second half. This is the first time this observation has been made using the numismatic evidence.

Excavations from Western Asia Minor: Pergamon, Sardis and Minor Sites

The last numismatic evidence of Byzantine economic presence in eastern Asia Minor, as elsewhere, is the group of anonymous *folles* of the eleventh century. In areas not under Byzantine control in the twelfth century Asia Minor, which constitutes most of Turkey beyond its western littoral, Komnenian coinage is hard to come by in excavations. Most of the coinage outside the western coastal areas are Seljukid or emirate issues of the twelfth century. Byzantine coinage in western Asia Minor in the twelfth century has two interesting peculiarities: the first is the proportion of the billon *trachea* among local finds and hoards from the area. The twelfth-century circulation seems to have been based on the billon *trachea* and the gold *hyperpyra* to the degree that it almost excludes the *tetartera*, which are extremely rare in both excavations and hoards. Both the written and archaeological evidence is of a nature that has prompted Hendy, Grierson, and recently, Papadopoulou, to argue that the disuse of *tetartera* in Asia Minor was likely a policy of the Komnenian emperors and cannot, as C. Lightfoot argues, be ascribed to the relatively poorer cataloging practice of the Turkish museums which tend to ignore the bronze coinage unlike their silver or gold (alloy or pure)

counterparts.¹⁸⁶ Compared to the aggregate numbers of the *tetarteron* and its half from the Corinth and Athens excavations, the paucity of *tetartera* in western Asia Minor awaits an explanation other than the possible presence of a third mint in Corinth or Thebes that would have facilitated the supply in Greece,¹⁸⁷ or the Komnenian monetary regulations; an analysis of the underlying mechanism that drove Manuel I to establish a third mint in southern Greece in the first place, or the Komnenian economic policy that either established or responded to an already visible variance between these two regions.

The second numismatic difference that distinguishes western Asia Minor from Greece is the relatively scanty presence of European coinage as well as local issues of *denier tournois* from the Peloponnese before and after ca. 1250. Even though the presence of these coins increases after the middle of the thirteenth century, they still remain marginal among the coin finds from the area. Given the apparent continuity of the Nicaean government's aspirations to control the coinage circulating in its territory, it is difficult to interpret the scarcity of western coinage in economic terms, especially whether or not the phenomenon may be seen as an indicator of the size of commercial

¹⁸⁶ C. Lightfoot, "Byzantine Anatolia: Reassessing the Numismatic Evidence," *Revue Numismatique* 158 (2002), 238-239. There are in fact a few *tetartera* (not its half) samples from western Asia Minor in the Bursa and Yalvaç museum collections as well as from Side excavations: R. Okçu, *Bursa Arkeoloji Müzesi Sikke Teşhir Kataloğu*, (Bursa, 2004); Z. Demirel-Gökalp, "Yalvaç ve Isparta Arkeoloji Müzelerinde Bulunan Bizans Sikkeleri," Unpublished Ph.D. Thesis, (Anadolu Üniversitesi Sosyal Bilimler Enstitüsü, Eskişehir, 2007); Atlan, *Side Kazıları*, 94.

¹⁸⁷ Hendy, 1969, 128-130.

ties between the two neighboring regions. This picture gets even more complicated because of the increased Turkish presence in western Asia Minor. By the 1330s a large chunk of the western littoral was conquered by the Turks—the south western part of Asia Minor, on the other hand, was already in Turkish hands as early as the first decade of the thirteenth century.

Another complication in interpreting the scarcity of the western coinage in western Asia Minor in the thirteenth century is the cataloging practices of the Turkish museums referred to above: once a western coin was taken to a museum, it usually would be registered under “Byzantine” coins and even in the rare instance when a scholar studies the Byzantine coin collection of a museum the western coins in that museum might eventually remain unpublished.¹⁸⁸ The collective evidence from western Asia Minor may also be hampered, to some degree, by the lack of detailed excavation reports apart from those on Pergamon, Sardis and a few others, which will be discussed below. The Pergamon excavations stand out both because of the total number of the coins derived from the site and because of the quality of the excavation reports. However, it is remarkable that I found no references whatsoever to pre-1250 Frankish, French, English, Venetian coins in western Asia Minor in the annual reports of all excavations conducted in Turkey since 1980. These same reports, however, do include

¹⁸⁸ I owe this observation to Dr. Zeliha Demirel-Gökalp who wrote her dissertation on the Byzantine coins from Yalvaç Museum and has experience working in Turkish museums on Byzantine coin collections.

references to a small number of coins left in the wake of the Crusading armies passing through Asia Minor, as well as post-1250 references of the coins listed above.¹⁸⁹ Despite the shortcomings of the current state of research, which are certainly not insignificant, I believe that the cumulative absence of the western coins issued before 1250 in Asia Minor is as significant as their presence thereafter, and demands an interpretation beyond modern scholarly error and negligence.

A survey of all of the volumes of annual Turkish excavation reports which started in the 1980s have revealed few, scattered references to dated numismatic evidence from the twelfth and the thirteenth centuries and none to western coins except for the eleventh- or twelfth-century western coins which the Crusaders had in their possession.¹⁹⁰ Yet, all of the sites that have attested thirteenth-century ceramic evidence are potential sites where western coins could have surfaced. This is especially true for the glazed-ceramic-producing-sites that survived into the thirteenth century. The overall picture, however, exhibits almost none of the same coins that were contemporaneously present in the Peloponnese/Achaia. In this way, western Asia

¹⁸⁹ See n. 8 and n. 190 (Part 1).

¹⁹⁰ Y. Ötügen, "2004 Yılı Aziz Nikolaos Kilisesi Kazısı ve Duvar Resimlerini Belgeleme, Koruma-Onarım Çalışmaları," *KST* 27.1 (2005), 299; Lightfoot, O. Koçyiğit, H. Yaman, "Amorium Kazısı 2005," *KST* 28.1. (2006), 288. The same observation on Crusader coins is true for reports on coin finds: Atlan, *Side Kazıları*, 95 where a coin of Arnold II, bishop of Cologne (1151-1156) is mentioned.

Minor is unlike not only Athens and Corinth, but also Constantinople.¹⁹¹ The presence of Latin and loyal/Bulgarian imitations in western Asia Minor in the early thirteenth century, points to some connection with Constantinople and possibly with Venice, although there are no pre-1250 issues of *grossi* there. However, once the mints in Thebes, Corinth and Clarentza began issuing local deniers after the 1250s these coins were brought across the Aegean and left their imprint in the excavation reports. The absence of French *deniers*, English sterlings,¹⁹² and the Venetian *grossi* before 1250, therefore, cannot be explained by a deficiency in the archaeologists' recording practices. The written evidence, on the other hand, does not explicitly mention any political impediments to trade between at least Venice and the Nicaean state in the 1220s. We will return to this question in a detailed analysis of the relevant evidence in Part 3.¹⁹³

The excavation results from Priene near Miletus on the western coast of Asia Minor mention six billon *trachea* alongside a single aspron *trachy* (*manuelatos*) of Manuel I, four billon *trachea* of Isaac II, three of Alexios III and from the thirteenth century, only

¹⁹¹ The evidence in Saraçhane, unfortunately, does not go beyond the first decade of the thirteenth century. All the important evidence therefore comes from Kalenderhane excavations: Hendy, "Roman, Byzantine and Latin Coins" (with catalogue) in Striker and Kuban, *Kalenderhane in Istanbul. The Excavations. Final Reports on the Archaeological Exploration and Restoration at Kalenderhane Camii 1966-1978* vol. 2 (New Haven, 1997), 175-276.

¹⁹² See Baker, "Νομίσματα, Νομισματοκόπια και Νομισματοκοπεία στις Μεσαιωνικές Κυκλάδες, 13ος-15ος Αιώνας," in N. G. Moschonas and L. Stylianoudi, eds., *Il Ducato de l'Egeo. Atti dell'Incontro di Studio* (Athens, 2009), 333-385 for an analysis of sterling, *grossi* and *denier tournois* finds from southern Greece. Also see, Stahl, "The Sterling Abroad," *The Haskins Society Journal* 18 (2006), 135-139.

¹⁹³ The Venetians were free to trade tax free at every locality of the state. The Nicaean merchants, on the other hand, had to pay the *kommerkion*. *TTh* II (1219), 206.

a single issue of Theodore I alongside a single penny of Henry III of England (1216-1272),¹⁹⁴ as well as a silver *dirham* of the Seljuk sultan Keyhusraw II (1236-1245).¹⁹⁵ All together there are nineteen coins issued in the twelfth and thirteenth centuries, seventeen of them identified as Byzantine, with one Seljuk and English silver issue each. Of the seventeen Byzantine finds, only four are identified as issues of thirteenth-century rulers, namely Alexios III and Theodore I, while the rest are from the twelfth century. Priene is about 10 km away from the Aegean Sea, and even though it was the “capital” of Sabas Asidenos who established his own rule in the area between 1204 and 1208, it does not seem to have been a site of economic significance on a similar scale to, for example, Pergamon or Sardis. Even though the twelfth-century coins are more numerous than the thirteenth, this small settlement does not seem to have been significant in the twelfth century either. Nevertheless, the remains—which consist of a small fortress with small habitations around it—are all dated to the twelfth and thirteenth centuries.¹⁹⁶ The difference between the twelfth- and thirteenth-century issues, and the absence of any issues from the reign of John III is significant, alongside

¹⁹⁴ The only indication is that this was a silver coin; in the absence of plates we do not know if this coin was a short or long-cross issue of the king. Henry III stopped issuing short-cross coins in 1247 when he began issuing long-cross coins. For a detailed description of the short and long-cross coins see C. Wren, *The Short Cross Coinage 1180-1247* (Kent, 1992) and *idem.*, *The Voided Long-Cross Coinage. 1247-1279. Henry III and Edward I* (Kent, 1993).

¹⁹⁵ K. Regling, *Die Münzen von Priene* (Berlin, 1927), 186-187. Some of the coins did not have a designated find spot, including one of the billon *trachea* of Manuel I and Henry III's penny. *Ibid.*, 192. Most of the twelfth- and thirteenth-century coins with known find spots are from the area of the altar dedicated to the Egyptian gods. *Ibid.*, 196. These contexts are unfortunately not dated.

¹⁹⁶ Foss, “Priene” in on-line *ODB* (Accessed 7. 23. 2011).

the presence of an not-securely-dated English sterling—one of a few Western coins noted on this side of the Aegean from the thirteenth century so far. In economic terms Priene seems to have been a relatively more active site during the twelfth century with respect to the thirteenth. It is, nevertheless, a site worth mentioning because one of the few western coins from western Asia Minor dated to the first half of the thirteenth century was found there. Given that there are no coins dated to the reign of John III at this site, it is more likely that the English sterling, if it indeed dates to the first half of the thirteenth century, entered the site under John III's predecessor, Theodore I.

The only other known western coins from the first half of the thirteenth century come from from Anaia. These coins consist of a single issue of Boniface of Montferrat (1204-1207) or Demetrios of Montferrat (1207-1224), two either Genoese or Venetian issues as well as a *grosso* from the end of the twelfth century. All the rest of the coins which have been found at this site, where the excavations are still continuing, are dated to the second half of the thirteenth century, and the fourteenth century (three in total).¹⁹⁷ These finds from Anaia are particularly important as they come from a Nicaean port that seems to have been quite active in the thirteenth century. I think it is also important to note this excavation's unique repertoire of early thirteenth-century Latin coins that likely reflects the presence of commercial contacts with the other side of the Aegean.

¹⁹⁷ Z. Mercangöz, "Emporion ve Kommerkion Olarak Anaia'nın Değişken Tarihsel Yazgısı," in eds. A. Ödekan, E. Akyürek and N. Necipoğlu, *Change in the Byzantine World in the Twelfth and Thirteenth Centuries* (Istanbul, 2010), 284.

The number of finds from Troy, Kyzikos and Side are also similarly humble and all include a small pocket of twelfth- and thirteenth-century Byzantine issues (mostly billon *trachea*, with one or two *tetartera*) and western coins—either twelfth century Crusader issues or coins from the second half of the thirteenth century. Troy, for example, had two billon *trachea* of Manuel I, one issue of Theodore I Laskaris, three issues of John III alongside a *denier tournois* of Guy II de la Roche (1287-1308) of Athens and one mid-fifteenth-century coin issued by Robert of Anjou.¹⁹⁸ In Troy, of the ten coins issued during the twelfth and the thirteenth century, only two—billon *trachea* of Manuel I—are from the twelfth century; the rest are from the thirteenth. Thus Troy's coin evidence is in accordance with the majority of the sites from western Asia Minor and confirms the increased economic activity during the thirteenth century with respect to the twelfth.

Side, a town to east of Attaleia on the Mediterranean coast, surprisingly—the site is considered abandoned after the eleventh century¹⁹⁹—produced two twelfth century *tetartera* (of Manuel I and Isaac II) while the rest are Seljuk coins with a single mid-twelfth century Crusader denier issued by the archbishop of Cologne.²⁰⁰ Bolu Museum houses a single grosso of Jacopo Contarini (1275-1280), registered among Byzantine

¹⁹⁸ A. Bellinger, ed., *Troy. The Coins* (New Haven, 1961), 181-183.

¹⁹⁹ Foss, "Side" in on-line *ODB* (Accessed 7. 23. 2011).

²⁰⁰ Atlan, *Side Kazıları*, 95-97.

coins.²⁰¹ No Byzantine coins after the *folles* of Nicephoros III (1087-1081) are recorded among the finds from Kyzikos; although a *grosso* of Raniero Zeno (1253-1268), a *denier tournois* of William II Villehardouin and Isabelle of Villehardouin each (1297-1301) are present.²⁰² Overall, therefore, except –possibly –for the single issue of Henry III from Priene, all of the western issues from these sites date after the middle of the thirteenth century. The same is true for the scanty evidence from Ephesos and Hierapolis.²⁰³

Although the overall numbers are very small, I find the proportions between twelfth- and thirteenth-century issues quite curious: the proportions of twelfth-century coins, especially those of Manuel I – which one expects to find at every twelfth-century site – are unusually low. Moreover, this pattern repeats at a number of different sites in western Asia Minor which is quite unlike what we encountered in sites from Greece.

The only excavation from Asia Minor comparable to Athens and Corinth in terms of the size of coin finds was conducted at Pergamon. Sardis, which I will discuss first, ranks closest to Pergamon, but with a much smaller number of relevant (that is, issues of the twelfth and thirteenth centuries) coin finds that include, nevertheless, eight

²⁰¹ Bursa Museum Record no. 428. I would like to thank Dr. Zeliha Demirel-Gökalp for the photograph of the coin.

²⁰² H. Köker, "The Roman Provincial, Roman Imperial, Byzantine, Medieval and Islamic Coins from the 1952-3 Excavations at Cyzicus," *NC* 167 (2007), 313-314.

²⁰³ J. G. Milne, "J.T. Wood's Coins from Ephesos," *NC* 19-20 (1925), 391; S. Yılmaz, "Hierapolis Antik Kenti Tripolis Caddesi Temizlik ve Düzenleme Çalışmaları," *VI. Müze Kurtarma Çalışmaları Semineri Didim 1995* (Ankara, 1996), 201-202; A. Ceylan, "VI. Dönem Hierapolis Roma Hamam Kazısı," *9. Müze Kurtarma Kazıları Semineri* (Ankara, 1999), 279.

Frankish coins from the latter half of the thirteenth and the first half of the fourteenth centuries.²⁰⁴ Of these eight, William I de la Roche (1280-1287) is represented by one *denier tournois* while Philip of Taranto (1294-1313) and John of Gravina (1318-1333) by six and three *deniers* respectively. In total the 1916, 1971, and 1981 publications on Sardis mention eighty-eight billon *trachea* extending between the reigns of Alexios I and John V. Only three of these coins have been identified as Latin imitations of John III's billon *trachea*.²⁰⁵ There are in addition only two issues of billon *trachea* of Michael VIII and a single billon *trachy* of John V (1341-1391), which closes the account of western and Byzantine coins as well as their imitations found in Sardis, which fell to the Turks in 1315.

Table 1. 13. Total Number/Value of Coins from Sardis and Pergamon

	Total Number and Values (in Billon <i>Trachea</i>) of Coin Finds in the Twelfth Century ²⁰⁶	Total Number and Values (in Billon <i>Trachea</i>) of Coin Finds in the Thirteenth Century
Sardis	8	78
Pergamon	106	227

²⁰⁴ T. V. Buttrey, A. Johnston, K. MacKenzie and M. Bates, *Greek Roman and Islamic Coins from Sardis* (Cambridge, 1981), 224-225.

²⁰⁵ *Ibid.*, 207. The first of publications on Sardis is by H. W. Bell, *Coins*, (Leiden, 1916), vol. 11 of the Publications of the American Society for the Exploration of Sardis followed by G. E. Bates, *Byzantine Coins* (Cambridge, 1971). There are three more references to Latin imitations of billon *trachea* of Isaac II (two) and Alexios III (one) in Bates' catalogue. See Bates, *Byzantine Coins*, 146. The tables of the 1981 publication include data included in the previously published works with some revisions.

²⁰⁶ Because the coins are billon *trachea* total numbers directly translate into total values.

At Sardis there is no evidence of loyal/Bulgarian imitations which seem to have been present in numbers comparable to their Latin counterparts in Pergamon. The minimal presence of twelfth-century Komnenian issues in Sardis (eight), with respect to the total number of eleventh-century coins (eighty-nine), all of which except for two are anonymous *folles*, is worthy of note. The numbers rise once again with the billon *trachea* of the Nicaean rulers (seventy-eight).²⁰⁷ None of the dated Seljuk, Ottoman or Turkish *beylik* coins predate the 1320s; the presence of eight Frankish *deniers* issued in the late thirteenth century indicates some contact with the western rulers on the other side of the Aegean.²⁰⁸

At Pergamon the loyal/"Bulgarian" and Latin imitations are equal in number (twenty each) and all of them happen to be billon *trachea*.²⁰⁹ The Byzantine coins minted between 1100 and 1328 constitute a total of 345 individual issues, among which there is only a single *tetarteron*; the rest are, again, billon *trachea*.²¹⁰ In terms of non-local issues, apart from the imitations, there are only two Seljuk copper coins from the reigns of Keyhusraw II (1237-1246), Keyhusraw III (1265-1282), one each, as well as a silver

²⁰⁷ T. V. Buttrey, A. Johnston, K. MacKenzie and M. Bates, *Greek Roman and Islamic Coins from Sardis*, 207.

²⁰⁸ *Ibid.*, 224-226.

²⁰⁹ H. Voegtli, *Die Fundmünzen aus der Stadtgrabung von Pergamon* (Berlin, 1993), 61-63.

²¹⁰ *Ibid.*, 9, 67.

Mamluk issue minted in the first half of the fourteenth century.²¹¹ The remaining Ottoman and west Anatolian silver issues of Turkish principalities date from the fourteenth century, overwhelmingly from after the 1320s, following the city's conquest by the Turkish Karasi.²¹² The two Seljuk and the single Mamluk issues together contrast with thirteen *deniers tournois* from the principalities of Achaia, (nine in total; the earliest samples are the two Clarentza issues of William II Villehardouin 1246-1278), Athens (two issues of William I de la Roche [1280-1287]), while the single *denier* issues of Alphonse of Toulouse (1251-1263) and Philip of Taranto (1294-1313) form the rest of the numismatic evidence dating from the late thirteenth and early fourteenth centuries in this site.²¹³ At both Sardis and Pergamon the overwhelming presence of thirteenth-century issues with respect to the twelfth-century issues shows the increased economic significance of these sites during the thirteenth century. As we have seen above, this is a trend that is a characteristic of the majority of sites in western Asia Minor.

Apart from the presence of three Islamic issues from the first half of the thirteenth century, in terms of coin finds the similarity between Pergamon and Sardis are noteworthy. The twelfth-century issues are significantly less frequent than what we encountered in Greece. In the same vein, the Komnenian billon *trachea* number slightly

²¹¹ *Ibid.*, 73-74.

²¹² *Ibid.*, 12.

²¹³ *Ibid.*, 79-80.

less than half (106) of the thirteenth-century billon *trachea* (227).²¹⁴ The numismatic evidence in the second half of the thirteenth century, in Sardis and Pergamon attests to some (direct) import of the Frankish issues of southern Greece then. More importantly, the relatively smaller total number of twelfth-century issues with respect to the thirteenth-century issues is quite significant and reinforces the observation made already from the hoard evidence from western Asia Minor: the numismatic trail the circulating coins left in the twelfth-century hoards and excavated sites in western Asia Minor is smaller than the trail left they left in the thirteenth century. Furthermore, since nearly all of the finds discussed above from western Asia Minor are in billon *trachea*, the differences in total numbers directly translate into a noteworthy rise of the total value of coins in these western Anatolian sites in the thirteenth century compared to that of the twelfth.

Based on three excavations in Corinth, Athens and Nemea we have seen that these sites were quite well supplied with coins as far as one can tell from the enormous number of small denominations issued in the twelfth century. Michael Hendy's suggestion of a mint in southern Greece solely dedicated to issuing *tetarteron* and its half seems quite probable. In southern Greece, during the first half of the thirteenth century, mainly because the local authorities did not issue coins, the relative number and value of coins in circulation seem to have remained low, pointing to a less

²¹⁴ The figure excludes the twelve coins issued under Andronikos II whose reign ended in 1328. *Ibid.*, 9.

monetized economy with respect to the previous century. During the first half the thirteenth century, the above mentioned sites, seem to have turned essentially to imported coins for their monetary supply. The local authorities began issuing coins (mostly silver) in the second half of the thirteenth century and this seems to have significantly improved the monetization of this area after the 1250s. During the first half of the thirteenth century, finds from sites in western Asia Minor, however, suggest a remarkably better monetized economy that depended heavily on Nicaean, local issues. If indeed the Nicaean rulers refrained from allowing foreign issues to circulate in their territories, in Nicaea we may be seeing an example of state run by a closely monitored monetary policy. Further evidence on Nicaean regulation of importation of certain foreign goods will be discussed in the following chapters of this dissertation. This chapter, alongside the previous one, however, has signaled that, perhaps, protectionist economic policy may have extended even to Nicaea's monetary policy.

Conclusions to Part 1

Overall, in Italy the Byzantine numismatic presence draws to an end at the beginning of the fourteenth century, 150 years before the end of the Byzantine state. Twelfth-century coins constitute a majority with respect to the thirteenth-century coins (27/12). Only between southern Italy and southern Greece does the monetary connection continue under Angevin rule through the fourteenth century. With tighter political ties, the number of thirteenth-century coins from southern Greece in Angevin Italy increases in the thirteenth century *vis-à-vis* the twelfth, even as those issued by the Byzantine government declined. In the rest of Italy, only Liguria (Luni) produced a Nicaean coin while only Apulia (Otranto) produced an Epirote issue. Palaiologan issues alongside Latin imitative coins were found in both Liguria and Apulia. Although the total number of coin finds may change in the future the ratios of the small number of Byzantine coin finds in Italy, and their decline from the twelfth to the first half of the fourteenth century is worth pointing out.

After 1204 in the Peloponnese, as can be discerned from the excavations in Athens and Corinth, cities were supplied by the French *denier tournois*, English sterlings, and possibly the Latin imitations, until Clarentza and Thebes started minting local *deniers* that simultaneously appear in Anjou-ruled southern Italy. Based on the evidence from excavations the presence of Nicaean coins in Greece is attested but Nicaean issues

in Greece are far from extensive. There is, however, no visible evidence of French, Frankish or Venetian coins going in the other direction to Nicaean soil during the first half of the thirteenth century. Western Asia Minor produced no evidence of the French *denier tournois* before the local mints in southern Greece started issuing their Frankish coins after the middle of the thirteenth. Likewise, there are no Venetian coins so far dated to the period before the second half of the thirteenth century that hail from western Turkey except for the late-twelfth-century *grosso* found in Anaia that might have remained in circulation during the first half the thirteenth century.²¹⁵ With the single possible exception from Priene there are no references to pre-1250 issues of sterlings either, unless the coin attributed to Henry III is in fact a short-cross type he issued before 1247—the year the king began minting long-cross coins. So far, Anaia constitutes the only certain exception to this phenomenon as the excavations at this port produced three early thirteenth-century issues, one of which belongs to either Boniface or Demetrios Montferrat, King of Thessalonike, and the other two are either Genoese or Venetian issues possibly from the first half of the thirteenth century.²¹⁶

Finally, our analysis has demonstrated that, overall during the first half of the thirteenth century, western Asia Minor under Nicaean rule, was doing much better than Greece in terms of coin supply and circulation in an economy which we will see was

²¹⁵ See p. 141 above.

²¹⁶ See p. 141 above.

strictly regulated during a turbulent period. The possibility that the Nicaeans, especially under John III, were re-minting foreign issues and that this practice was discontinued under the Palaiologans has also emerged from our study of coin deposits.

This examination of the circulation patterns of twelfth- and thirteenth-century coins from hoards and excavations shows a significantly low value and number of hoarded and excavated coins in twelfth-century western Asia Minor, and considerably elevated overall coin values and numbers from both hoarded and excavated coins in the thirteenth century, especially in its first half. Greece, by contrast, in numismatic and economic terms, was well-supplied in the twelfth, but possibly much poorly supplied in the first half of the thirteenth century, that is, during the first fifty years under its new rulers. For Greece numismatic improvement took place during the second half of the thirteenth century. To the degree that these patterns of monetary circulation are revealing of the broader trends of the economy, I am tempted to conclude that the overall prosperity of mainland Greece, especially its southern sections in the twelfth century *vis-à-vis* western Asia Minor was significant. Part 1 thus attested important regional differences between Greece and western Asia Minor that date from the twelfth century, which altered only after the middle of the thirteenth century by way of improved coin supply and circulation in Greece and its depletion in western Asia Minor. But are these trends in coin circulation revealing of the broader trends of the overall economy? To answer that question and to deepen the insights we have gleaned

from the coins, let us turn to the independent evidence of another kind of material that changed hands and circulated in these regions: ceramics.

PART 2 Ceramics and Exchange in the Post-Conquest Byzantine World

Introduction

This section analyzes ceramic production in Asia Minor and Greece between the second half of the eleventh and the middle of the thirteenth century. The focus of Part 2 is not on coarse wares but on the better-understood fine wares which comprise between 5-10 percent of wares at excavated sites. I will discuss the differences between different fine ware types and offer a relative date-range for each type. I will then give a site-by-site discussion of the fine wares, analyzing the fine ware finds from sites in all of Asia Minor and Greece. This analysis will begin with Constantinople in Chapter 4 because it is the best study of the so-called White Wares comes from an excavation in the capital. These wares were Byzantium's major fine ceramics exported to other cities within the empire until the provincial fine wares supplanted—and eventually replaced them—by the middle of the thirteenth century.

After the Constantinopolitan White wares we discuss in Chapters 5 and 6 the evidence from sites in eastern Asia Minor (Chapter 5) and proceed westward to discuss sites in Greece (Chapter 6) and finally we will study the development of Corinthian fine ware production in relation to evidence about Byzantine fine wares found on European sites (Chapter 7). A table presented as Appendix 3 will assist the discussion of finds from each site. The red-bodied glazed fine wares of the last quarter of the eleventh

century mark the beginning of a new phase in Byzantine fine ware production. I refer to the latter development as a “new phase” mainly because of the visible increase in the number of sites that produced or imported these red-bodied fine wares starting in the late eleventh and early twelfth century. Yet the breakthrough in terms of the aggregate numbers of fine wares coincides with the potters’ use of tripods from about 1200 on. The tripod allowed potters to fire more wares at once, with, presumably, considerable cost savings in fuel. It was now technically possible to stack bowls or plates on top of each other in the kiln, using the tripod as a separator between wares. Thus, Part 2 uses a large body of data which continues to expand every year as new sites are excavated and make available new ceramic data. Part 2 analyzes the significant developments the Byzantine fine ware production underwent between the late eleventh and the mid-thirteenth centuries. Appendix 3 provides a gazetteer of the types of wares found at each site studied in Part 2. It is hoped that the reader will consult it as a handy reference for general information on the ceramic landscape of an excavated site, building or surveyed area. The evidence is greater today than it has ever been. As it continued to increase, it will surely modify and improve the early insights presented here, but it is high time to get started on this task.

In the future when scientific analyses of ceramics in the Aegean region are done in a systematic manner we will have a significantly improved, accurate understanding of the fine ware production sites and how their production changed over time. With the

present analysis our intention is to present an accurate picture of the major ceramic producing centers of Byzantium in the twelfth century and how these centers were functioning in the thirteenth century. Whether or not new centers were taking the place of the old centers is also a question we ask of the ceramic evidence at hand. By doing this analysis we try to understand the internal dynamics within the Byzantine system, how fine ware production was organized in the twelfth century.

We will also study the fine ceramic evidence from outside Byzantium to assess the picture that fragments of Byzantine fine wares in the Middle East and Europe allow us to paint. Like the Byzantine coins, Byzantine fine ceramics, if they are preserved in a fair condition, are easily distinguishable from the local ceramics and other imports—wherever they may have been found. Because they are distinguishable, if found in significant amounts over a relatively long period of time, fine ceramics serve as reliable indicators of trade that survive in the archaeological remains unlike the other, much more expensive commercial item we will look at in Part 3, the textiles.

In making this analysis, I have encountered and had to recognize different methods of counting and vastly different levels of reporting, which range from precise quantification of all recovered fragments to purely qualitative statements relating to the amount of fine wares such as “richly represented,” “rarely noted,” “relatively common,” and the like. It is not uncommon that the reports include no information on

the proportions of wares and their relative temporal sequences. All of these variations in reporting ceramic evidence have been included in the gazetteer where the reader can immediately notice the scale of variety. While this variety limits the ability to deliver a definitive analysis of the aggregate ceramic evidence, a careful weighing of the different reporting levels nevertheless leads to important new observations, insights, and questions for further study.

Another problem we encountered with different reporting techniques is the custom of lumping the twelfth- and the thirteenth-century wares together without distinguishing their temporal sequences. Each excavation or survey that we study and discuss yields a complex set of evidence that needs careful dating on the basis of the totality of the finds (including the coins), the building sequence of architectural structures, and the stratigraphy, which ultimately depends on the analysis of these findings. Deducing possible dates for a site depending solely on the dates yielded by the results of other excavations or from pottery that are roughly dated to “the twelfth or the thirteenth century” does not further our knowledge. The difficulty surrounding our understanding of the changes the Byzantine sgraffito underwent in the thirteenth century, and the competition it experienced from foreign pottery types can only be understood by detailed, localized studies that scrutinize these wares in their given contexts. To alleviate the consequences this customary approximation of fine ceramics’ relative chronologies, to the extent possible, in this study we applied an inductive

method matching the level of detail the topic requires, that is, the changes the Byzantine pottery production and consumption underwent between the late eleventh and mid-thirteenth centuries.

CHAPTER 4

Production and Distribution of Byzantine Ceramics in Asia Minor and Greece: New Evidence for their Development and Spread

Interpreting the ceramic evidence of twelfth-century Byzantium, that is to say, before the beginning of large-scale ceramic production in Byzantium around 1200, is complex. The complication is twofold: first, it is not easy to locate the production sites, and second, it is not easy to understand how (and why) the methods of production and forms of distribution of pottery changed over the course of the twelfth century. The complications continue after 1200 since in the thirteenth century both the locations and the types of production seem to have diversified considerably. This chapter is about these complications, and sets the stage for a better understanding of their economic implications. We will then be better positioned to begin our analysis of Byzantine fine ceramic finds from various sites in Asia Minor and Greece between the late eleventh and the thirteenth centuries in the following three chapters.

Constantinopolitan White Wares and the Provincial Sgraffitos at a Glance

Byzantine fine ware production can be divided into two main groups. The first comprises the Glazed White Wares which, according to John Hayes, form the backbone of Byzantine pottery starting in the seventh century.¹ The Glazed White Wares replaced

¹ J. W. Hayes, *Excavations at Sarachane in Istanbul* vol. 2 *The Pottery*, (New Jersey, 1992), 18. Hayes studied a large number of ceramic finds at Saraçhane in Istanbul. According to Hayes the White Wares virtually

the red-slipped, buff, red fabric wares of Late Antiquity and as such they mark the transition from Roman to Byzantine luxury ceramic production, one that is dominated by the white-bodied wares produced in or in the vicinity of the capital out of a clay source rich in calcium. It is this type of ware that began to emerge in the seventh century and to slowly replace the red-bodied, red-slipped wares of Antiquity.² These wares ultimately dominated fine ceramic production in the twelfth century. Glazed White Wares were certainly the favorite local ceramic wares in the capital. These wares were also imported, though usually in small amounts, in the provinces in Asia Minor and mainland Greece up to the thirteenth century, as well as in important centers, particularly in the tenth-twelfth centuries, at sites such as Cherson and Mesembria on the Black Sea, in the Balkan inland and southern Italy, which slipped out of Byzantine control in the eleventh century.³ Because of the relatively small number of Glazed White Wares outside the capital, Hayes deduced that they may “signify no more than casual

ceased production in the first half of the thirteenth century, following the large scale dissemination of the sgraffito wares.

² J. Vroom, *Byzantine to Modern Pottery in the Aegean. An Introduction and Field Guide* (Utrecht, 2005), 62-63.

³ Cherson, A. L. Yakobson, “Srednevekovaja polivnaja keramika kak istoriceskoe javlenie,” *VizVrem* 39 (1978) 148-159; J. Henning, “The Metropolis of Pliska or, How Large does an Early Settlement have to be in Order to be Called a City?” in J. Henning, ed., *Post Roman Towns, Trade and Settlement in Europe and Byzantium* vol. 2 (Berlin, 2007), 216-218; M. Popovic, *The Fortress of Ras* (Belgrade, 1999), 407 (English summary); J. Čimbuleva, “Vases à glaçure en argile blanche de Nessebre,” in V. Velkov, ed., *Nessebre*, (Sofia, 1980), 202-253, where the author mentions that White wares also found at the excavations at Varna and Sozopolis. For Italy see, E. D’Amico, “Glazed White Ware in the Italian Peninsula: Proposals for a Study,” in Çanak, *Late Antique and Medieval Pottery and Tiles in Mediterranean Archeological Contexts*, B. Böhlendorf Arslan, H. W. Orr, A. O. Uysal, eds. (Istanbul, 2007), 214-238.

trading contacts.”⁴ This may not be true any longer, because, as we will see, many sites outside the capital in fact imported this ware, which suggests that they were a desired fine ware exported far and wide outside the capital.

New wares gradually began to appear on the same archaeological horizon in Constantinople as the Glazed White Wares of the capital at the end of the eleventh and the beginning of the twelfth centuries. The unifying factor of these fine wares is their red clay body covered with a white slip, and as such these wares constitute the second large group of Byzantine fine wares. These would eventually replace the White Wares of the capital in the thirteenth century. Of the red clay white-slipped wares, an important subset is the sgraffito ware. In a sgraffito ware, after the application of the slip, the decoration is cut through to the body using a stylus. Following the application of the decoration the potter dips the clay body into a clear or colored lead-based glaze. The sgraffito potters thus created an artistic contrast between the decorations incised on the red body and the white slip which is coated over it. The Byzantine sgraffito wares show a remarkable conformity in style and are distinguishable from the other “great schools of sgraffito pottery.”⁵ This uniformity is especially true of the twelfth-century

⁴ Hayes, *Excavations at Sarachane*, 18.

⁵ A. Lane, “The Early Sgraffito Wares of the Near East,” *Transactions of the Oriental Ceramic Society* 15 (1937-38), 46. According to Lane the other great schools were in Mesopotamia- Samarkand, West Persia and Egypt. *Ibid.* 46-47. Also see E. Grube, *Islamic Pottery of the Eighth to the Fifteenth century in the Keir Collection* (London, 1976); M. Jenkins-Madina, *Raqqa revisited. Ceramics of Ayyubid Syria* (New York, 2006); for ceramics found at the Seljuk palace in Konya see R. Arık, *Kubad Abad. Selçuklu Saray ve Çinileri* (Istanbul, 2000).

Byzantine sgraffito wares. The potters of the thirteenth and the fourteenth centuries built upon the repertory of the previous centuries and exhibited an eclectic style that drew on a variety of techniques all at once.⁶ Furthermore, the available –if limited– scientific analyses pertaining to the late thirteenth century point to a conjunction of decorative styles and tastes in this period.⁷ Sgraffito wares in general and, in particular, the fine Byzantine sgraffito wares of the late eleventh and twelfth centuries, display a sophistication of technique that requires delicate work and precision.⁸ The supply of these sophisticated and generally uniform wares responded and adapted to the changes and shifts in domestic demand. Based on the evidence I will discuss, I argue that three major developments took place: first, the emergence of the Byzantine sgraffito technique in the eleventh century, second, its production in numerous sites, itself a reflection of the rise in the demand for this ware. Thirdly, while the emergence of the sgraffito technique took place in the late eleventh century, the more sophisticated methods for increased output at production sites via new firing techniques is a phenomenon that seems to have taken place at the turn of the twelfth century.

⁶ D. Bakirtzis, ed., *Byzantine Glazed Ceramics, The Art of Sgraffito* (Athens, 1999), 21. Bakirtzis notes that Late Byzantine wares are more eclectic and make use of a variety of techniques on a single piece of pottery at once.

⁷ For one solid and recent example see M.J. Blackman and S. Redford, “Neutron Activation Analysis of Medieval Ceramics from Kinet, Turkey, Especially Port Saint Symeon Ware,” *ANES* 42 (2005), esp. 105-106. The Original Port Saint Symeon Wares (PSS) and the PSS produced in the vicinity of Kinet date from after ca. 1280.

⁸ For a useful study of the details of the sgraffito technique and its specific details based on samples from the Louvre and the Museum of Ceramics at Sevres, see C. Vogt, “Technologie des céramiques byzantines à glaçure d’époque Comnène,” *Cahiers archéologiques* 41 (1993) 99-110.

For the first half of the eleventh century, little evidence suggests that the Byzantines, in particular the residents of the capital, imported the glazed fine wares produced in Syria. Some evidence for the small-scale import of Syrian fine wares comes from the Serçe Limanı Shipwreck dated to the 1030s. The Serçe Limanı ship contained forty-three glazed bowls that included Islamic *champlevés* and splash-decorated wares from Caesarea Maritima; the ship sank off the coast of modern Bodrum with its colossal glass cargo.⁹ For the mid- to late twelfth century, however, there is solid evidence from Saraçhane that the Byzantine sgraffitos, in particular the fine sgraffito wares of the twelfth century, had to compete with the contemporary Islamic wares, and guessing from their numbers (some 160-180 fragments of Islamic pottery as opposed to ca. 90 sgraffito fragments) at Saraçhane alone, the Islamic wares seem to have been more popular in Constantinople overall.¹⁰

⁹ Neutron Activation Analysis and petrographical analysis suggest that the ceramic cargo (37 of 43) in the wreck was from Caesarea Maritima. See, M. Jenkins, "Early Medieval Islamic Pottery: The Eleventh Century Reconsidered," *Muqarnas* 9 (1992), 56-66. Of the 43 glazed wares, 10 are identified as *champlevé*, 10 splash-painted, 1 monochrome bowl and 16 are "fragmentary bowls." The remaining six are identified as non-cargo bowls (five with monochrome, one with polychrome decoration). Personal communication of Prof. F. van Doorninck, who has my thanks. The date of the wreck is based on the latest of the 16 glass weights as well as 3 Fatimid quarter *dinars* of gold, 15 gold clippings from other coins, and some 40 Byzantine copper coins. The latest coin is an issue of Fatimid caliph Al-Zahir (1020-1035); Byzantine copper coins were issued under Basil II (976-1025). See G. F. Bass, S. D. Matthews, J. R. Steffy, F. H. van Doorninck, Jr, eds., *Serçe Limanı. An Eleventh Century Shipwreck. The Ship and its Anchorage, Crew and Passengers* (College Station, 2004), vol. 1, p. 8 n. 5, 270-271.

¹⁰ Hayes, *Excavations at Sarachane*, 43-44. Hayes refers to only 90 fragments of Byzantine fine sgraffito wares from Saraçhane's twelfth-century layers.

It is useful to consider first how the best-studied and best-dated ceramic material from Constantinople is classified. Looking at 20,000 odd fragments, John Hayes notes that Glazed White Wares form the backbone of Byzantine fine pottery starting in the seventh century, an assumption based on the Yassiada Shipwreck dated via a coin of Heraklios. Here's how Hayes classified the finds from Saraçhane from the early seventh century on: he dates the Glazed White Ware Group 1 from the seventh to the tenth century, noting that they are "not really white" but bear a thin brownish slip, perhaps imitating the previous Late Roman wares and their variants that were red-bodied wares usually covered with a transparent, sometimes colored glaze. The Glazed White Ware Group 2 is Macedonian and Komnenian Byzantine white ware "par excellence."¹¹ It begins tentatively around 900. Its consistent white clay bears yellowish or green glaze applied directly on the body, without any intermediary slip. Impressed decoration is most common but it has brown staining (a reddish slip causes the staining) and incised decoration as well. One interesting observation concerning this period during which Group 2 subsisted is the appearance of the red fabric wares (imports?) among the finds.¹² Sometime during the eleventh century this new red-bodied ware appears among the Constantinopolitan sites. This is the first instance of the "provincial" sgraffitos appearing in the soil of the capital.

¹¹ Hayes, *Excavations at Sarachane*, 18.

¹² *Ibid.*, 21.

Group 2 is chronologically followed by Glazed White Ware Group 3 which is tentatively dated to the eleventh and twelfth centuries, even though the dating “presents severe problems” since Group 2 continues to be produced, making it difficult to date when one starts and when the production of the other comes to a halt; Group 3 and Group 2 seem to have been contemporary for a while.¹³ Group 3 is similar to polychrome wares because of its hard, white, fairly consistent body with occasional red particles. The glaze is of different composition than that of Group 2 and it has a strong tendency to decay. Overall, both the polychrome ware and the glazed Group 3 are fewer in quantity among the Saraçhane finds.¹⁴ Glazed White Ware Group 4 marks this transition from the white wares to the red-bodied wares, for the later levels at Saraçhane revealed fragments of Zeuxippus wares, Orange Brown Glazed Ware, Dark Brown Glassy Glazed Ware and Coarse Incised Ware, while the late Byzantine contexts where one would expect to find the painted broadly incised sgraffito wares are missing at the site.¹⁵ Glazed White Ware 4 is by far the most common Saraçhane ware assigned to the mid-twelfth and early thirteenth century. It remained in high fashion in the capital “until an undetermined year in the thirteenth century.”¹⁶

¹³ *Ibid.*, 29.

¹⁴ *Ibid.*, 30.

¹⁵ *Ibid.*, 47-48.

¹⁶ *Ibid.*, 30-31.

Hayes' study builds upon and clarifies the stratification of the ceramics from the Great Palace which Stevenson studied. Great Palace ceramics comprise 7,000 fragments of glazed pottery which Stevenson divided into six chronological groups based on the evidence of coinage; they parallel Hayes' classification above.¹⁷ Significant—and comparable to what Hayes pointed out—is Stevenson's observation that in the post-Komnenian period the Constantinopolitan White Wares "die out."¹⁸ Their place was taken by the elaborate incised ware, often with intricate patterns under a green or orange glaze, in other words, the red-bodied, white slipped, glazed wares of the provinces which dominated the Byzantine ceramic scene around 1200. The famous fine wares of the capital gasped their last breath in the thirteenth century, after having been produced for about six centuries.

Rice's 1928 discussion of the pottery from the Hippodrome conforms to the picture carefully outlined by Stevenson and Hayes.¹⁹ Kalenderhane yielded a record number of fragments, some 350,000 pieces of which two-thirds are Byzantine. Unfortunately, at Kalenderhane, despite the opportunity to date the material

¹⁷ *The Great Palace of the Byzantine Emperors. Report of the Walker Trust (The University of St Andrews) 1935-1939*, (London, 1947), 33-57.

¹⁸ *Ibid.*, 60.

¹⁹ D. Talbot Rice, "Byzantine Pottery" in the *Second Report upon the Excavations Carried out in and Near the Hippodrome of Constantinople in 1928* (London, 1929), 22-35. For the wares found at Sirkeci Büyük Postane see H. Wallis, *Byzantine Ceramic Art. Notes on Examples of Byzantine Pottery Recently Found at Constantinople with Illustrations* (London, 1907). Also see, J. Ebersolt, *Catalogue des potteries byzantines et anatoliennes de Musée de Constantinople* (Constantinople, 1910).

stratigraphically, by laying out the pottery's temporal sequence, the "green glazed, painted" White Wares which survive into the Latin period are dated only roughly to the twelfth century. All together the *champlevé*, polychrome wares, including the residue White Wares from the previous period, without any further information are dated only to the twelfth and thirteenth centuries.²⁰ Judith Herrin's masterful report, however, presents a much more accurate but incomplete presentation of the material that was available to her.²¹ Most significantly, her report evaluates the pottery "within their contexts." The pottery from the naos, bema, north aisle, and external atrium of the church included what she terms "proto-Zeuxippus" ware in the same context as twenty-six coins of Isaac II and Alexios III (1195-1203) alongside the white wares from the capital which are predominant particularly in the naos.²² From the same context as the coins is a single bowl which she identifies as "Corinthian" which is of "buffish pink ware with a band of very neat white sgraffito decoration below the carination."²³ By contrast, all the post-1203 coins were recovered from the south side of the church. In the

²⁰ C. Striker and D. Kuban, "Work at Kalenderhane Cami in Istanbul: Fifth Preliminary Report (1970-74)" *DOP* 29 (1975), 313, 315.

²¹ J. Herrin, *Report on the Archaeological Significance of the Roman and Byzantine Pottery from Kalenderhane Camii, Istanbul* (London, 1972). Herrin's report is based on an unspecified number of a select group of material that took into consideration the archaeological contexts in its analysis. The most recent publication on Kalenderhane has no discussion of the contexts and the finds as the report, but only a catalogue of the pottery. See Herrin and A. Toydemir, "Byzantine Pottery," in *Kalenderhane in Istanbul. The Excavations*, eds. Striker and Kuban (Mainz am Rhein, 2007), 69-122. I am grateful to Prof. Herrin for allowing me to use her 1972 report.

²² Herrin, *Report*, 56-57; 60.

²³ *Ibid.*, 65.

south side, Herrin found an “unbroken sequence of pottery from ca. 1200-1300,” which suggests that “there was no fundamental change in ceramic production and use as a result of changes in political domination.”²⁴ The south side yielded two Zeuxippus dishes, one of them in the same context as a “coin of ca. 1210+” and pieces of glazed sgraffito that had, like the Zeuxippus, tripod marks.²⁵ There is very little mention of White Wares on this side of the church in which the latest datable coin is from 1220.²⁶ Herrin notes, in addition, that the evidence for the phase of occupation after the recapture of the city by the Nicaeans, “is extremely disturbed by later activity in the area.”²⁷ A total of nine fragments of fine pottery that represent the pottery finds post 1261, which include four datable coins with the “latest of 1261-1295.”²⁸ The fine pottery is composed of three fragments of sgraffito ceramics specified as Zeuxippus Ware, alongside other sgraffitos with green glaze and splashes of yellow geometric motifs, as well as a single Constantinopolitan White Ware bowl.²⁹ The evidence is too small to be conclusive, leaving Hayes’ stratification of Saraçhane ceramics as the only major analysis of the twelfth- and thirteenth-century pottery in the capital. Hayes’ observation

²⁴ *Ibid.*

²⁵ *Ibid.*, 71, 73.

²⁶ *Ibid.*, 75.

²⁷ *Ibid.*, 83.

²⁸ *Ibid.*, 85.

²⁹ *Ibid.*, 83-87 for a description of the pottery from the latest levels. White Ware is on p. 86.

about the Glazed White Ware Group 4 losing the market to the sgraffito wares in the early years of the thirteenth century, however, finds support in Kalenderhane. Hayes also taught us that the red-bodied wares appeared for the first time in the late eleventh and early twelfth centuries. How do we then, classify the sgraffitos?

At the Myrelaion Church (modern Bodrum Cami) in Istanbul, none of the Byzantine levels contained pottery in any great quantity apart from fragments in level 3 (chronologically later than level 2; levels 2, 4 and 5 have no catalogued ceramic fragments and levels 6 and 7 are Turkish) and the graves.³⁰ In the earliest fill at the naos, Hayes noted ceramics that purportedly resemble the so-called Port Saint Symeon (PSS) ware of Syria which Lane dated to ca. 1200, but that are now dated to post ca. 1250. The wares from the area immediately below the tile floor contain the latest pottery fragments of the Byzantine era, and can hardly be earlier than ca. 1300 on the basis of their decoration, style and glaze types.³¹ In sum, there are only fourteen pieces, and among them the glazed wares are all dated to the thirteenth-fourteenth centuries with the exception of the two White Ware dish bases.³² The finds from the 1m pit near St. Irene yielded dug-out ceramics heaped onto the southern side of the church. The heap contained early forms of the impressed White Wares, painted wares, polychrome wares

³⁰ Hayes, "The Excavated Pottery from the Bodrum Cami," in Striker, *The Myrelaion in Istanbul*, (New Jersey, 1981), 36-41.

³¹ *Ibid.*, 36.

³² *Ibid.*, 38-39.

and unglazed pottery. Because no sgraffito ware is found among the remains, and since there is no numismatic evidence, Peshlow dated the heap to ca. 850-1000.³³ The rescue excavations conducted on the site of the Four Seasons Hotel revealed both coins and pottery; however, the coin evidence was not taken into consideration in dating the material. The excavators note the difference between the “level below the brick pipe line” where glazed ceramics disappeared and the level above it, where they are present. Beyond this all we know is that the coin dates range between the ninth and the thirteenth centuries.³⁴ The correct dating of the sgraffitos is significant not only for our understanding of the economic development in the empire; it also serves a practical purpose by helping date layers especially where numismatic evidence fails.

The shift in the capital from the red wares of Late Antiquity to the White Wares in the seventh century was possibly a result of the slowing of trade and a decline in the overall economy. The economic decline seems to have marked the end of the trans-regional supply of pottery across regions hit hard by an overall decline in demand. Politically speaking, economic decline also caused a downward trend in the state’s capacity to control the economy; the seventh century is also marked by the

³³ U. Peschlow, “Byzantinische Keramik aus Istanbul. Ein Fundkomplex bei der Irenenkirche,” *IstMitt* 27/28 (1977/1978) teil I, 361-414.

³⁴ A. Pasinli, “Pittakia ve Magnum Palatium- Büyük Saray Bölgesinde Yapılan 2000 Yılı Kazı Çalışmaları,” 13. *Müze Çalışmaları ve Kurtarrma Kazıları Sempozyumu* (Denizli, 2001), 1-22 and *idem.*, “Pittakia ve Magnum Palatium- Büyük Saray BölgesindeYapılan 2001 Yılı Kazı Çalışmaları” 14. *Müze Çalışmaları ve Kurtarrma Kazıları Sempozyumu* (Ankara, 2003), 1-16.

disappearance of the state-sponsored institution of the *navicularii*, the subsidized shippers who carried grain and oil from Africa and Egypt to the capital, for example.³⁵ Interestingly, the late sixth century, or more precisely, the reign of Maurice (582-602) constitutes the end of the brick stamps marking the state-sponsored production of bricks in the capital.³⁶ Turning to local resources as a result of the economic decline and loss of Egypt and parts of Syria that had supplied pottery along with the *annona* may well be what is reflected in the attempt of the capital to use nearby resources. The new Constantinopolitan pottery was made with the lime-like clay found in the city's vicinity. In present day terminology, Hasköy, Kasımpaşa, Ayvansaray and Eyüp along the Golden Horn, and Büyükdere and Yeniköy on the Bosphoros, are known to have been production sites of white wares that continued into the Ottoman period: the white or yellowish sandy clays of these sites were used to make the white wares of the capital.³⁷ A study of white-bodied tiles used in buildings, for example, finds their concentration in the capital and its hinterland noteworthy. Based on the analysis of the tiles, Mason and Mango concluded that two different soil types were used in white ware clay bodies: one high in lime and the other high in iron oxide. They argued for the existence of a

³⁵ J. Durliat, *De la ville antique à la ville byzantine* (Rome, 1990); A. J. B. Sirks, *Food for Rome: the Legal Structure of the Transportation and Processing of Supplies for the Imperial Distributions in Rome and Constantinople* (Amsterdam, 1991). Also see McCormick, "Bateaux de vie, bateaux de mort: Maladie, commerce, transports annonaire et le passage économique du Bas-Empire au Moyen Age," *Morfologie sociali e culturali in Europa fra tarda antichità e alto medioevo*, *Settimane*, 45 (1996), 37-40.

³⁶ J. Bardill, *Brickstamps of Constantinople* (Oxford, 2006), 42.

³⁷ *Ibid.*, 5, 8.

production site not too far from the capital.³⁸ The evidence provided by written sources point to Nicomedia,³⁹ and the presence of ceramic workshops in the capital remains unproven. Véronique François argued for workshops, such as those in Nicaea, close to Constantinople giving the large accumulations of White Ware wasters at the theater in Nicaea discarded before the application of glaze, as evidence for her assumption.⁴⁰ The White Wares replaced the red-slip wares of the late Roman world in the seventh century and, based on Hayes' analysis as well as finds outside the capital, they came to be an export item by the tenth century, a luxury ceramic, as opposed to the red-bodied local wares of the provinces. Later, in the thirteenth century the White Wares themselves were completely replaced by the sgraffito wares; Glazed White Ware Group 4 was the commonest type of fine ceramic as Hayes deduces from the finds at Saraçhane from ca. 1150 until it fell out of fashion in the thirteenth century, exactly around the time when we see an increase in the "mass-produced" sgraffitos, such as the Zeuxippus, among the pottery deposits.

³⁸ R. B. Mason and M. Mundell-Mango, "Glazed 'Tiles of Nicomedia' in Bithynia, in Constantinople and Elsewhere" in eds. C. Mango and G. Dagron, *Constantinople and Its Hinterland* (Oxford, 1995), 313- 331.

³⁹ *MM* vol. 3, 55. The text mentions a church ornamented "διὰ τανστρίων Νικομηδείων" translated usually as "by Nikomedian tiles." The document was issued in 1192.

⁴⁰ V. François, "Les ateliers de céramique byzantine de Nicée/Iznik et leur production (Xe-début XIVe siècle)," *BCH* 121/1 (1997), 417. B.Yalman, "Iznik Tiyatro Kazısı 1983," *KST* 6 (1984), 462; *idem.*, "Iznik Tiyatro Kazısı 1985," *KST* 8.2 (1986), 240; *idem.*, "Iznik Tiyatro Kazısı 1986," *KST* 7 (1987), 313.



Fig. 2. 1. Zeuxippus Plate.
D. Papanikola-Bakirtzi, ed. *Byzantine Glazed Ceramics. The Art of Sgraffito* (Athens, 1999), Pl. 70, p. 71.

Nicaea also yielded red-bodied ceramics, slip-painted with geometric designs such as circles and virgules, etc. with orange/yellow or greenish glaze. The incised ceramics, and the *champlevé*, were also numbered among the locally produced wares. Nicaea, therefore, emerges as a locality where both white and red-bodied wares were produced: the evidence concerning the production of the white wares, on account of the half-

finished examples that are found on site, is certain.⁴¹ Evidence of wasters from kilns, as well as kilns themselves where red-bodied glazed sgraffito wares were produced, were also excavated within the Nicaean city walls. These excavations suggest further that when kilns collapsed or were destroyed, new ones were built immediately to replace them, resulting in site-continuity through the Ottoman period.⁴² The problem encountered outside Nicaea in terms of the dating of the finds may be seen in Nicaea as well, despite the coin finds excavated together with the ceramics. For example, the kiln excavations in the theatre revealed red-bodied, white-slipped sgraffito wares unearthed

⁴¹ *Ibid.*, 419, 426. F. Şahin, "İznik Kuşlu Seramikleri," *Ark Sanat* 78 (1997), 25-27. Şahin argues that the clay used in the production of red-bodied wares were abundant in Kızılhisar, Hisardere and Elbeyli, all near Nicaea.

⁴² O. Aslanapa, S. Yetkin and A. Altun, *The Iznik Kiln Excavations* (Istanbul, 1989), 100, 161. Yalman, "İznik Tiyatro Kazısı 1981," *KST* 4 (1982), 229-236.

together with “many Byzantine coins” concerning which no dates are given, even though the stratigraphy of the site is said to be fairly explicit.⁴³

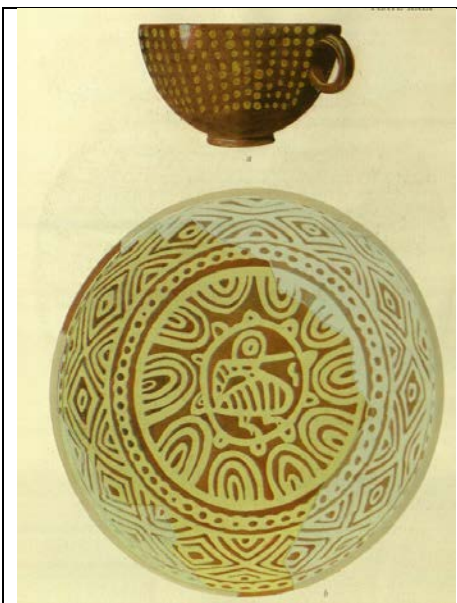


Fig. 2. 2. Slip-Painted Ware.
C. H. Morgan, *The Byzantine Pottery*.
Corinth vol. 11 (Cambridge, Mass.,
1942), Pl. 29.

Also noteworthy is the discovery of another section in the theater, which seems to have exclusively been devoted to kilns and ceramic workshops as one can deduce from the tripods and red-bodied, white-slipped, glazed sgraffito wares with bird and floral motifs found there.⁴⁴ These are distinguished from the “earlier Middle Byzantine White Wares” which begin about 1.40 meters below the surface, at a site where the probing sometimes went as far down as 2.5 meters.⁴⁵ The theater excavations also revealed graves

⁴³ B.Yalman, “Iznik Tiyatro Kazısı 1982,” *KST* 5 (1983), 218. *Idem.*, “Iznik Tiyatro Kazısı 1985” *KST* 8.2 (1986), 243.

⁴⁴ *Idem.*, “Iznik Tiyatro Kazısı 1987,” *KST* 10.2 (1988), 352.

⁴⁵ *Idem.*, “2002 Yılı Iznik Tiyatro Kazısı,” *KST* 25.2 (2003), 393.

with twenty-six Nicaea-issued “Lascarid coins” though their contextual relationship with the rest of the finds is not clear.⁴⁶ However, from the same sounding a number of red-bodied, white-slipped, sgraffito wares with floral designs and animal motifs under a green or yellow glaze, were also unearthed.⁴⁷ The presence of the sgraffitos together with the White Wares, as we know primarily from Hayes’ study, in the absence of any other datable material, can point to any date-range between the late eleventh and the thirteenth centuries. We do know that the sgraffitos first appear in the late eleventh century. The end date, however, of the production of the Glazed White Wares in Nicaea cannot be determined on the basis of the current state of archaeological research; a detailed study of the pottery together with the coins dated to the period between the eleventh and the fourteenth centuries can potentially clarify the important changes the ceramic industry underwent in this important city. Most importantly, we are in the dark about the active period of the sgraffito kilns in the city. A reliable classification of the sgraffitos from the end of the eleventh through the thirteenth centuries, when their “mass-production” began, is thus sorely needed.

Nevertheless, the evidence for the rise in the supply and presumably also the demand of the pottery during the twelfth and thirteenth centuries can be seen even in the modern museum collections of Europe and North America, among others: it is the

⁴⁶ *Idem.*, “Iznik Tiyatro Kazısında Bulunan Çini Fırını,” *Sanat Tarihi Yıllığı* 13 (1988), 169.

⁴⁷ *Ibid.*, 160.

sgraffito wares of the twelfth and the thirteenth centuries that constitute the highest proportion of Byzantine ceramics. They also constitute the most abundant fine pottery samples among the excavated finds that the twelfth and thirteenth-century levels yield.⁴⁸ Further evidence pertaining to the same phenomenon from excavated sites will be discussed below.



Fig. 2. 3. Champlevé Plate.
C. H. Morgan, *The Byzantine Pottery*.
Corinth vol. 11 (Cambridge, Mass., 1942),
Pl. 52.

The sgraffito ware itself has a subset of variations depending on the type of the incisions made, the coloring, as well as the decorations. The fine sgraffito wares in which the incised decorations are executed with a thin stylus constitute the prime fine pottery of the Komnenian period. D. Bakirtzis proposes that the fine sgraffito's domination of the market ended around the middle of the twelfth

century when coarser versions (sometimes called the "broad," or "widely incised")

⁴⁸ Ed. S. Campbell, *The Malcove Collection. A Catalogue of the Lillian Malcove Collection of the University of Toronto* (Toronto, 1985), 181-188. See nos. 252-259, sgraffito bowls dated between the twelfth and the fifteenth centuries. Ed. C. Stiegemann, *Byzanz. Das Licht aus dem Osten. Kult und Alltag im byzantinischen Reich vom 4. bis 15. Jahrhundert. Katalog der Ausstellung im Erzbischöflichen Diözesanmuseum, Paderborn* (Mainz, 2001), 355-363, depicts eight samples of fine sgraffito and its coarser versions; P. Armstrong, "Byzantine Glazed Ceramic Tableware in the Collection of the Detroit Institute of Arts," *Bulletin of the Detroit Institute of Arts* 71 (1997), 4-15. Also see E. Brouscari, "Collection Paul Canellopoulos," *BCH* 112 (1988), 503-517 contains 17 pieces of sgraffito wares with and without tripod signs on the surface that are dated to the period between the twelfth and the sixteenth centuries. The same trend is true for the Russian collections: A. Banck, *Byzantine Art in the Collection of the USSR* (Leningrad-Moscow, *sine anno*), 369-373: most of the fine pottery are twelfth-thirteenth-century sgraffito wares from Cherson.

seem to have taken over. The appearance of the *champlevé* style in which the slip is carved out of the red body creating the designs and/or the figures, is considered to be contemporary with the coarsely incised versions of the sgraffito.⁴⁹ On the sgraffito wares, coloring was applied either by painting the incised lines or by the glaze itself. Lead-based glaze sets Byzantine ceramics apart from those of their neighbors both eastern and western. The usual glaze colors for the Byzantine sgraffito ware are green (copper oxide), yellow (iron oxide) and brown, dark purple (manganese oxide).⁵⁰

⁴⁹ Bakirtzis, *The Art of Sgraffito*, 19-20; B. Böhlendorf-Arslan, *Glasierte byzantinische Keramik aus der Türkei*, (Istanbul, 2004), vol. 1, 111-149 for an overview of the sgraffito wares, slip-painted wares and the subsets of the former including the Aegean and the Zeuxippus wares which she collects under the heading “red-bodied wares.” Also see J. Vroom, *Byzantine to Modern Pottery in the Aegean. An Introduction and Field Guide* (Utrecht, 2005).

⁵⁰ It would be very helpful to know the provenance of these colorants and whether colorants used in paintings are different than those used in pottery. R. Keller, ed., *Artists’ Pigments. A Handbook of their History and Characteristics*, vol. 1 (Cambridge, 1986), is useful, but it focuses on pigments used in paintings only.

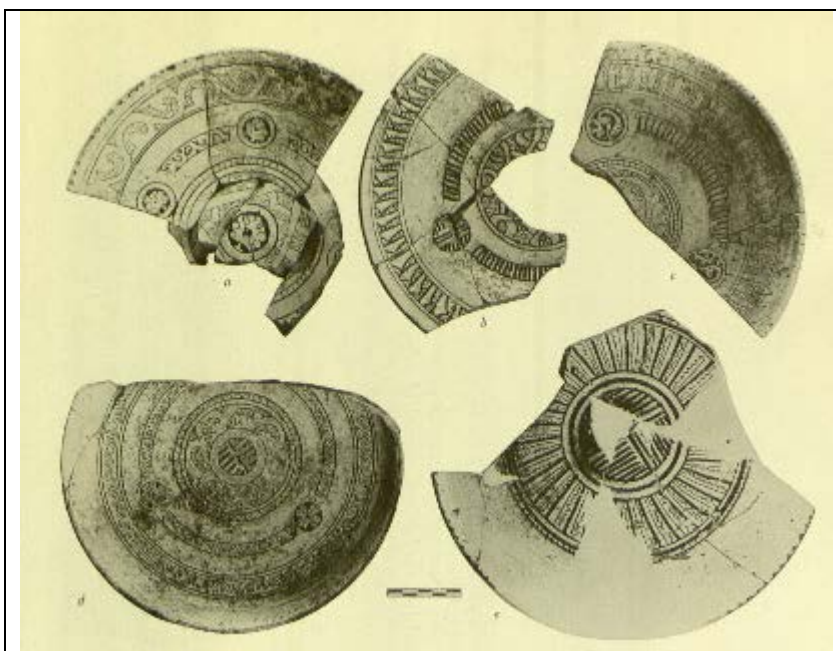


Fig. 2. 4. Fine-Incised Sgraffito Ware. C. H. Morgan, *The Byzantine Pottery. Corinth vol. 11* (Cambridge, Mass., 1942), Pl. 48.

A very useful table of the relative dating of the eleventh- and the twelfth-century wares is reproduced here for the convenience of the reader. The table is based on a valuable study of the fine ceramics from the Boiotia survey.⁵¹ The classification of the fine ware evidence from Boiotia finds consistent support in the eleventh to thirteenth century layers of each well-studied site, but its consistency is rarely noticed by the art historians or archaeologists because the accumulation of information on the repertoire of the eleventh-to-the thirteenth-century Byzantine wares is a relatively recent phenomenon.

⁵¹ J. Vroom, *After Antiquity. Ceramics and Society in the Aegean from the 7th to the 20th century A.C. A Case Study from Boeotia, Central Greece* (Leiden, 2003).

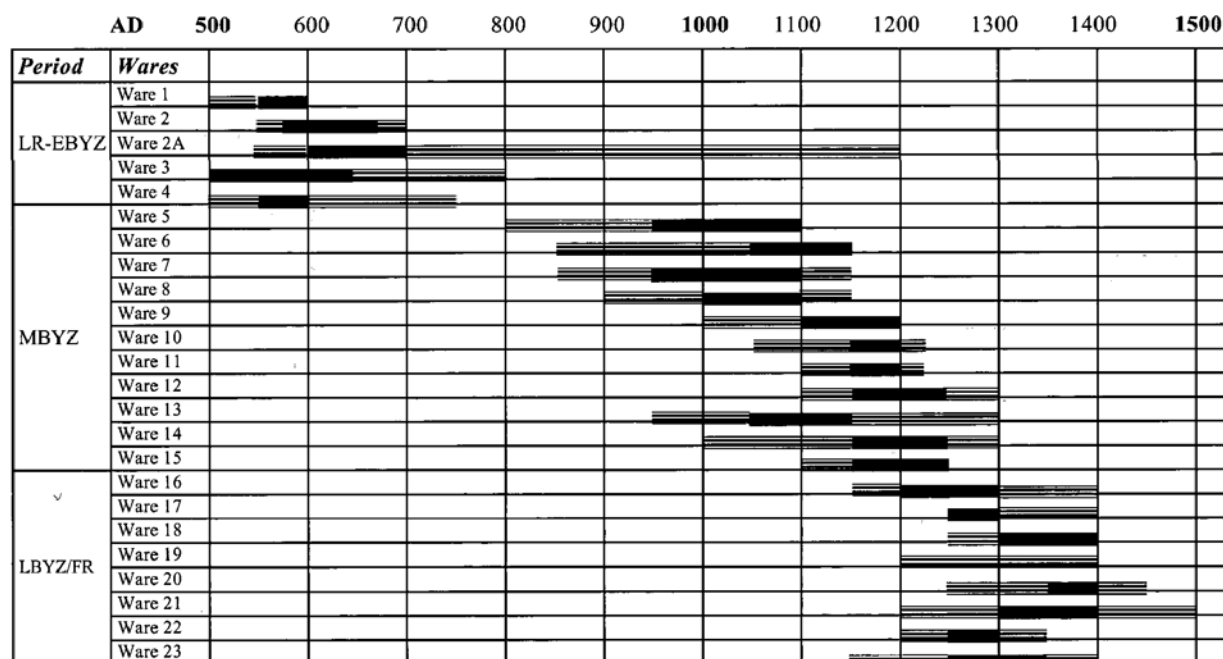


Fig. 2. 5. *Horizontal Chronology of Boiotian Samples with Key. From J. Vroom, After Antiquity. Ceramics and Society in the Aegean from the 7th to the 20th century A.C. A Case Study from Boeotia, Central Greece (Leiden, 2003), 136, 187. Dark shade indicates certain period of use; horizontal stripes indicate possible period of use.*

Ware 5	Fine Orange-Red Burnished Ware	Ware 14	Unglazed Domestic Wares
Ware 6	Unglazed Incised Ware	Ware 15	Incised Sgraffito and Champlévé Wares
Ware 7	Plain Glazed Ware (in red and grey fabric)	Ware 16	Zeuxippos Ware Subtypes
Ware 8	Plain Glazed Ware (in white fabric)	Ware 17	Monochrome Sgraffito Ware from Corinth?
Ware 9	Slip-painted Ware	Ware 18	Monochrome Sgraffito Ware from Thessalonike
Ware 10	Green- and Brown-Painted Ware	Ware 19	Other Monochrome Sgraffito Wares
Ware 11	Fine Sgraffito Ware	Ware 20	Brown and Green Sgraffito Wares
Ware 11a	Painted Fine Sgraffito Ware	Ware 21	Slip-painted Ware
Ware 12	Günsenin 3/ Saraçhane 61 amphora	Ware 22	Polychrome Lead-glazed Ware Type "RMR"
Ware 13	Otranto 1 amphora	Ware 23	Unglazed Domestic Wares

According to the Boiotia classification, the Green- and Brown-Painted and the slip-painted wares are the precursors of the Byzantine fine sgraffitos, including the *champlevés*, as we will see in detail below. These two ware types occur essentially in the earliest layers dating to the twelfth century.



Fig. 2. 6. Green- and Brown-Painted Bowl.
C. H. Morgan, *The Byzantine Pottery. Corinth vol. 11* (Cambridge, Mass., 1942), Pl. 22.

Two important subsets of the sgraffito wares need further definition: the so called Aegean Wares and Zeuxippus Wares. The Aegean Wares typically have a low ring base, incised decoration, dabs of green in the pale yellow glaze. The white slip and the glaze are limited to the interior, and they usually overlap at the rim. The glaze is always yellow, often quite pale, and sometimes mottled with pink/purple. In cases where the decoration consists of dabs of green, the

yellow glaze often takes on a greenish tint; sometimes the green drips down toward the center of the dish indicating that they were fired standing on their ring bases. In no case of Aegean ware have the tripod scars been noticed that are always left on the inside of the bowls which have been stacked in the kiln upside down one inside the other and separated by tripod stilts. Unlike the Aegean Wares, the Zeuxippus usually have tripod marks and in Cyprus they are stratigraphically later than the former (i.e. the Zeuxippus

appear on layers above the Aegean) to the former.⁵² The tripods, with their implication of increased volume of production for a similar amount of combustible, are a strong indication of the response to the rise in the demand of these wares, and the Zeuxippus Ware, because of its tripod scars, is thought to be the symbol of this phenomenon.

Demetra Bakirtzis dates the appearance of the tripods to ca. 1200 for they appear on Type 2 Zeuxippus wares first. They turn up, roughly similar to the Aegean Wares, less in mainland Greece, Black Sea and the Balkans and more in the Eastern Aegean, Cyprus and the coastal cities of the Middle East.⁵³ A Zeuxippus Ware usually has a coarse red fabric, thin walls and meticulously incised decoration with plain or sometimes yellow-brown glaze. Stylistically, the typical examples have three concentric circles drawn precisely with a compass (the compass mark is identified based on the presence of a little hole in the center of the design), two larger ones bordering both sides of the edges and one in the middle around the medallion right at the heart of the ware.⁵⁴ Below I will discuss—site by site—this significant transition from the White Wares to the red-bodied glazed wares which embodies the changes the Byzantine ceramic production

⁵² A. Megaw, "An Early Thirteenth Century Aegean Glazed Ware," in G. Robertson and G. Henderson, eds., *Studies in Memory of David Talbot Rice* (Edinburgh, 1975), 34-46.

⁵³ Bakirtzis, *The Art of Sgraffito*, 22; *eadem*, "Τριποδίσκοι ψησίματος των Βυζάντινων και μετά βυζάντινων Αγγείων," in *Αμνητος. Τιμητικός Τόμος για τον Καθηγητή Μανόλη Ανδρόνικο* (Thessalonike, 1987), 641-648.

⁵⁴ Megaw, "Zeuxippus Ware," *BSA* 63 (1968), 67-88; *idem.*, "Zeuxippus Ware Again," *Recerches sur la céramique byzantine*, BCH supplement XVIII (Paris, 1989), 259-276; *idem.*, "Zeuxippus Ware" in ed. Ch. Bakirtzis, *Congrès international* (Athens, 2003), 91-100. Also see, J. Rosser, "Stratigraphic Evidence for the Chronology of Saranda Kolones Castle (Cyprus)," in *Çanak. Late Antique and Medieval Pottery*, 411-418.

underwent in the twelfth and thirteenth centuries. The discussion begins from the east, and although it sometimes veers off in other directions, the discussion essentially flows from the east to the west.

Map 2. 1: Sites Discussed in Relation to Fine Wares



Stylistic developments partially explain the shift from white to red body in Byzantine ceramic production. The producers of red-bodied wares in the capital and in the provinces might have tried, with the application of white slip, to imitate the white ware of the capital that was indeed a desirable export item, as the ceramic finds from

the provincial settlements illustrate.⁵⁵ The fine sgraffito wares seem to be one of the earliest Byzantine ceramic samples that signal the development of production of the red-bodied wares of the provinces. Bakirtzis proposes a twelfth-century date for the fine sgraffito wares and dates the *champlevé* as well as the Measles Ware of Peloponnesos to roughly the middle of the twelfth century.⁵⁶ This dating is supported by the evidence from Amorium which was captured by the Turks in 1116, since so far no sgraffito wares have been found there, as I will discuss below. However, we also know that the earliest evidence for the broadly incised sgraffito (a more coarse form of sgraffito) has been recovered on sites such as Yumuktepe and Hierapolis (which will also be discussed in detail below) from the same contexts as late eleventh-century coins. From around 1200, tripod marks begin to appear on the wares; this is a turning point by which the transition from the White Wares to the red fabric wares was completed. This argument finds support in Hayes' observation concerning the end of the Glazed White Ware Group 4 in the thirteenth century.⁵⁷

Also significant is the typological change that both the fine and coarse wares underwent as a result of the alteration in the Byzantine eating habits. In a recent preliminary survey, Joanita Vroom studies the Last Supper scenes depicted in frescoes

⁵⁵ L. Doğer, "Bizans Seramikleri," *Antik & Dekor* 55 (1999), 148. Doğer argues that sgraffito comes after slip painted wares and that the change took place in late eleventh century.

⁵⁶ *Byzantine Glazed Ceramics, The Art of Sgraffito*, ed. D. Bakirtzis (Athens, 1999), 19-20.

⁵⁷ *Ibid.*, 21.

and mosaics from the fifth to the fifteenth century.⁵⁸ She observes a proliferation of the tableware and cutlery in twelfth- and early thirteenth-century depictions of the scene and she notes that the real shift from communal to small-group dining habits took place in the thirteenth century when the diners still shared one bowl between two or three men, but the variety and the numbers of the cups, jugs and cutlery on the Last Supper table increase remarkably from the thirteenth century on.⁵⁹ Oikonomides reminds us that cutlery (mostly wooden) and table wares were rarely used in the lower- and middle-class Byzantine households and that people normally ate with their fingers out of a larger serving plate and drank from a common cup/bowl or jar.⁶⁰ In her discussion of 12,000 potsherds from Boiotia in Greece Vroom discusses the “functional and cultural context” of fine table wares and once again observes that the flatter plates seem to have been used for communal serving while watery dishes or drinks were served in smaller, individual bowls.⁶¹ Analyzing the typology of Boiotian fine wares, Vroom most importantly notes that the large, shallow, open vessels were going out of fashion in the thirteenth century, signifying an important shift from a communal to an individual

⁵⁸ J. Vroom, “The Changing Dining Habits at Christ’s Table,” in eds. L. Brubaker and K. Linardou, *Eat, Drink, and Be Merry (Luke 12:19)- Food and Wine in Byzantium*, (London, 2007), 191-222.

⁵⁹ *Ibid.*, 199-200.

⁶⁰ Oikonomides, “The Contents of the Byzantine House from the Eleventh to the Fifteenth Century,” *DOP* 44 (1990), 212.

⁶¹ J. Vroom, “Byzantine Garlic and Turkish Delight,” in *Archaeological Dialogues* 7 (2000), 199-216.

dining habit.⁶² On purely stylistic grounds, based on his reading of the tenth-to the twelfth-century literature, Maguire also argues that the depictions of hunting scenes on the sgraffito wares were thought to bring prosperity and good fortune to the household they belonged to.⁶³ Overall the practical uses and possible symbolic meanings of fine wares underscore their elevated status and limited frequency of everyday use which explains their relatively small numbers in comparison to the coarse wares.

Nevertheless, the twelfth but especially the thirteenth century marks a turning point in terms of a shift toward individual dining habits accompanied by a rise in the production as well as the availability of fine wares thanks to the use of tripods. If true, these developments might indicate an improvement in the purchasing power of the population. If these assumptions are true for the twelfth- and thirteenth-century Byzantine sites, one would then expect to find more bowls and cups as opposed to flat, large plates in excavations and an increase in the overall number of fine wares during these periods. The discussion below implies that during the said periods more fine wares were produced, and if Boiotia is taken to represent a similar trend in the rest of the empire, the former too holds true.⁶⁴ Overall, these observations underline the

⁶² *Ibid.*, 203-204.

⁶³ H. Maguire, "'Feathers Signify Power:' The Iconography of Byzantine Ceramics from Serres," in *Διεθνές Συνέδριο. Οι Σερρες και η Περιοχή τους από την Αρχαία στη Μεταβυζαντινή Κοινωνία*, vol. 2 (Thessalonike, 1998), 383-398. Alternatively, these wares could possibly be used in "lekanomancy," prophesying using tubs and basins as a story related by Choniates suggests. *Ibid.*, 383-385.

⁶⁴ Vroom, "Byzantine Garlic and Turkish Delight."

significance of careful recording of not only the aggregate numbers but also the forms and stylistic differences of the surviving ceramic fragments. Unfortunately, this has been done in only a few excavations and surveys.

There is no evidence contradicting the time range proposed for the approximate dates for the beginning of red-bodied white-slipped ware production late in the eleventh century and its expansion starting ca. 1200. For example, the excavations at the “palace complex” in Prusa (modern Bursa) revealed sgraffito wares as well as unglazed wares.⁶⁵ No White Wares were unearthed and there are no coins to help date the finds, hence, the presence of the sgraffitos gives only a date range that *starts from* the late eleventh century.

As we have seen, the latter half of the eleventh century constituted a turning point for the development of fine ware production in the Byzantine Empire. Our analysis of the evidence from excavated sites in Constantinople, namely, the Hippodrome, Great Palace, Saraçhane, Kalenderhane and Myrelaion, has consistently shown the long-term significance of the red-bodied wares. Slowly, these wares broke the dominance of the Constantinopolitan White Wares through the twelfth century as we can discern from their rising numbers on Constantinopolitan soil. Finally, in the thirteenth century, the latest member of the White Ware group from the capital (Group

⁶⁵ Ö. Özeren, K. Hançer, F. Ünal, “Bursa-Bizans ve Osmanlı Yapı Kompleksi Kazısı 2000” in *12. Müze Çalışmaları ve Kurtarma Sempozyumu Kuşadası 2001* (Ankara, 2002), 149-156.

4) was replaced by fine sgraffito wares imported from outside the city, from the “provinces.”

It is not clear what is meant by the term “provinces.” The next three chapters are an attempt at clarifying this important but largely unexplored point. It is also worthwhile to note that, regardless of where the production sites of the Byzantine sgraffitos were located, this chapter has also shown that the only significant ceramic imports into Constantinople were coming from Byzantium’s eastern neighbors, as Islamic luster wares are amply represented in the tenth and eleventh century layers in the excavated sites within the capital, especially Saraçhane—a piece of evidence we have used in conjunction with the Serçe Limanı Shipwreck off the coast of Bodrum. It seems therefore that when the provincial sgraffitos began production in large enough numbers that warranted their exportation, these Byzantine wares were competing against Constantinople’s fine wares and the Islamic luster wares alone. What these late-eleventh- and twelfth-century sgraffito types are and their relative chronologies can best be seen in Vroom’s study on Boiotia. Our study confirms her chronology of these wares via evidence from other sites across the empire as we will see below. Ultimately, in the thirteenth century, the provincial sgraffitos won the competition against the fine wares of the capital. What happened to the imports into Byzantine lands in the thirteenth century will be discussed in the following chapters.

In this chapter we have also briefly touched upon the changes in the dining habits of the Byzantines. This discussion has underscored that, if Vroom's observations are correct, the shift from communal to individual dining habits in the late twelfth and early thirteenth century might also have been accompanied by an increase in the production of ceramic wares in general. This increase in turn might be related to an improvement in the purchasing power of individuals if fine wares were also produced in greater numbers—a point we have left unexplored in this chapter. Of course, the new technical invention of the tripod certainly supports the assumption that more ceramics, and by analogy, more fine ceramics were produced ca. 1200 onwards. We should note that this new technique is associated with the sgraffito wares that took their name from the ancient baths of Zeuxippus in Constantinople. This ware is abundantly present not only in the capital but in sites in western Asia Minor, Greece, the Middle East and Europe. We do not know for sure where Zeuxippus wares were crafted, even though it will be clear that more than one location can claim to be its producer. Thus, in the next chapter, we will turn to the fine ware evidence starting from Korucutepe in eastern Asia Minor and proceed toward sites in western Asia Minor. We will then study the evidence from Greece and Italy to acquire a better understanding of the development of fine ware production in the provinces there. Our purpose, again, is to locate production centers and evaluate the changes they went through in the thirteenth century.

CHAPTER 5

Production and Distribution: Byzantine Ceramics in Asia Minor between the Late Eleventh and Mid-Thirteenth Centuries

Following the last quarter of the eleventh century and by ca. 1120 most of the possessions of Byzantium east of Amorium in the east, except for the Black Sea and the Mediterranean coastal areas, had fallen to Turkish control. The anonymous *folles*, were the last remnants of Byzantine political presence in eastern Asia Minor. Unlike the *folles*, the Byzantine ceramic exports outside of the Byzantine borders in the east did not end at ca. 1100.

In this chapter we begin our analysis with the excavated or surveyed fine ware ceramics that come from outside the eastern borders of the Byzantine empire. We will study the fine ware ceramic scene of the sites, discussing the local production as well as imports at each location, to the degree that the excavation or survey reports allow. In doing this, our purpose is to understand the changes in the scale of Byzantine exports and in the types of the fine ceramics that were traded with these locations. In the eastern sites the sequence and the overall significance of the Constantinopolitan White wares, the late-eleventh- and twelfth-century-Byzantine sgraffitos and the thirteenth-century Zeuxippus wares will become apparent. The evidence discussed here is intended to supplement what we know from Constantinople concerning the provincial

production of fine wares and can be checked against these sites far from the capital both within and outside the shifting eastern borders of the Empire.

Let us begin to the east, at the site of the Keban Dam north west of modern Elazığ which was probably in Turkish hands after 1071. The pottery here is dated to the thirteenth and fourteenth centuries, based on stylistic grounds and coin evidence. The presence of abundant tripods suggests that pottery was produced locally. At Korucutepe both the glazed and the unglazed wares are of red fabric. The glazed wares are covered with a thin coat of white slip under a colored transparent lead glaze.⁶⁶ Among these wares the decorations are identified as sgraffito (60 percent) and *champlevé* (35 percent) although they are not considered Byzantine in style.⁶⁷ Central compositions with appended radial patterns are the most recurrent compositions among the Korucutepe glazed pottery, which can, according to the excavators, be easily distinguished from their Seljuk counterparts.⁶⁸ However, given the lack of conclusive evidence for dating these wares, it is not possible to conjecture when the production of slip-covered pottery began at the site and how far into the Turkish period the white

⁶⁶ Ö. Bakırer, "The Medieval Pottery and Baked Clay Objects," in M. N. van Loon, ed., *Korucutepe. Final Report on the Excavations of the Universities of Chicago, California and Amsterdam in the Keban Reservoir, Eastern Anatolia 1968-1970*, vol. 3, (Amsterdam, 1980), 223, 196-198, 204-207.

⁶⁷ *Ibid.*, 210.

⁶⁸ *Ibid.*, 220. On the differences between the Turkish and the Byzantine wares see. B. Böhlendorf-Arslan, "Die Beziehung zwischen byzantinischer und emiraszeitlicher Keramik," in *Ortaçağ'da Anadolu Prof Aynur Durukan'a Armağan* (Ankara, 2002), 135-146. The earliest coin is possibly the one identified as "Rum Seljuk, 12th or 13th century" without a specific date.

slipped, red fabric wares continued to be produced, even though they are distinguishable from their Seljukid counterparts on stylistic grounds, and even though the area fell outside Byzantine control following 1071. The datable coins from Korucutepe are all from the thirteenth and fourteenth centuries,⁶⁹ and most of the fragments of glazed pottery from the site have striking similarities to Al Mina type wares (also called PSS) recovered from other late-thirteenth early-fourteenth-century sites in this area which I will discuss below.⁷⁰ At this inland site there does not seem to have been Byzantine fine wares in the thirteenth century; the fine ceramics to the site came from Syria.

Southwest of Korucutepe is another important site, to which Lane devoted his well-known study of the essentially thirteenth-century wares in Syria.⁷¹ At Al Mina, known also as Portus Sancti Symeonis, or the Port of St. Symeon (hence, the abbreviation for wares from this port is PSS), southwest of Antioch, the numismatic evidence suggests that the settlement was in existence as an important port and production site well before 1200.⁷² The “9-10th century levels” at Al Mina contained a great quantity of lead-glazed pottery in white slip. It takes three forms: the first group

⁶⁹ M. N. Van Loon, “The Other Medieval Objects,” in ed. M. N. van Loon, *Korucutepe*, 263-264.

⁷⁰ Bakırer, in *Korucutepe*, 203-204, 207 also see plates nos. 95-111,

⁷¹ A. Lane, “Medieval Finds at Al Mina in North Syria,” *Archaeologia* 87 (1938), 19-78.

⁷² *Ibid.*, 23.

has flowing colors or spots of green, yellow-brown and manganese purple; the second is with colors painted in a definite design, but without engraving, and the third group has flowing colors or monochrome glaze over incised patterns which makes potsherds in this group “a true sgraffito ware.”⁷³ In all three cases the clay is light red; white slip and lead glaze cover the entire surface of bowls and dishes including the foot ring.⁷⁴ Lane considers that all of these ware types were produced locally in the thirteenth and the fourteenth century.

In terms of imported fine wares, on the other hand, Lane wrote that “in the thirteenth-century level, there were a few potsherds of that unpleasant white-bodied ware, with monochrome olive green or yellowish glaze that seems to have been a product of Constantinople itself.”⁷⁵ These fragments belonged probably to Group 4 Constantinopolitan White Wares. The red-bodied, white-slipped fragments decorated in sgraffito were more frequent and Lane divides them into two groups: the first had a thick fabric of fine, hard orange clay and occurs in shallow bowls with a simple lip and low foot-ring. The decoration is scratched “with a very fine point which hardly penetrates beyond the slip into the body,” and consists of narrow concentric bands of stylized leaf patterns. The second group—usually bowls—had thinner walls, with a

⁷³ *Ibid.*, 35.

⁷⁴ *Ibid.*

⁷⁵ Interesting but not surprising that Constantinopolitan White Ware got here in the thirteenth century right around the time when their production in the capital died out.

characteristic high foot and carinated lip. The slip is thicker than that of the finely engraved class. The decorations consist of narrow concentric circles cut deeply into the body, forming a medallion in the middle. Touches of yellow brown and green are applied to these patterns near the lip forming zigzags or wavy lines.⁷⁶ From Lane's description, these wares seem to correspond to the Byzantine sgraffitos of the early thirteenth century, in particular the so-called Zeuxippus wares. The upper soil and higher rubbish pits, on the other hand, produce a greater quantity of sgraffito ware of a kind very different from that found lower down in the stratification. Only over the most visible parts the surfaces of this type of ware bear white slip, which is a sign of quick, less expensive production.⁷⁷ It was "evidently the pottery most commonly used by the crusaders."⁷⁸ The presence of kiln wasters at Al Mina shows that pottery was produced there; but it was "not intended for local use."⁷⁹ According to Lane, the kiln *must have been made* between 1217 (when the pilgrim castle at Atlit, where exactly similar pottery is found, was built) and 1268 when Al Mina was captured by the Mamluks.⁸⁰ However,

⁷⁶ *Ibid.*, 43.

⁷⁷ *Ibid.*, 46-47.

⁷⁸ *Ibid.*, 45.

⁷⁹ *Ibid.*,

⁸⁰ *Ibid.* In terms of proposed dates of the finds, as well as the forms and styles, the similarity between Al Mina and Cypriot wares is striking. However, the differences were apparent to Lane when he saw the Cypriot wares: "Last summer after helping at Al Mina I went to see all the pottery from local sites in the Cyprus museum; the differences between the two fabrics become at once apparent when there is plenty of material for comparison. Both employ touches of added green and brown, but the slip and glaze used in Cyprus are usually finer; the shapes are dissimilar, and Cypriot-drawing lacks the coarse vigour of the

no evidence supports the assumption that Al Mina PSS wares are specifically Crusader-made sgraffitos,⁸¹ or that their production came to a halt with the Mamluk conquest. Lane's work is nevertheless important in presenting a new sgraffito style that emerged in Syria sometime in the thirteenth century. From Lane's reference that these wares come from the upper soil and higher rubbish pits, it seems safe to assume that they came after the Byzantine sgraffitos, the Zeuxippus wares in particular. Hence, if our identification of the White Ware fragments and Zeuxippus wares based on Lane's descriptions are correct, it is possible to assume that this port town was importing both the Constantinopolitan White Wares and the Zeuxippus wares in the thirteenth century. Both forms die out in the period following the Mamluk conquest in 1268.

Luckily, we now have a better understanding of when the production of the PSS was extended to other sites –a process which the Zeuxippus wares and its derivatives seem to have gone through at the beginning of the thirteenth century. Thanks to a relatively recent study of Blackman and Redford based on INAA (Instrumental Neutron Activation Analysis),⁸² solid dates are available for the growth of the PSS which

Syrian ware. Moreover, the human figures so common in Cypriot ware never wear eastern dress; sometimes they look quite gothic." Lane, "The Early Sgraffito Ware of the Near East," 53.

⁸¹ See, D. Pringle, "Medieval Pottery from Caesarea: the Crusader Period," *Levant* 17 (1985), 171-202.

⁸² Blackman and Redford, "Neutron Activation Analysis of Medieval Ceramics from Kinet, Turkey, Especially Port Saint Symeon Ware," *ANES* 42 (2005), 83-186. NAA is now being challenged by another method, the laser ablation. Researchers argue that this method is as reliable as the NAA and yields accurate information on the basis of a much smaller sample. On this recent technology and how it is applied to ceramics see *Laser Ablation- ICP-MS in Archaeological Research* ed. R. Speakman and H. Neff,

previously was thought to have been an early thirteenth-century ware, with the Mamluk conquest in 1268 marking the end of its production at Al Mina. Chemical analysis of the pottery from Kinet (ancient Issos), and coin samples from different occupation phases now suggests that the production of PSS imitations and thus the expansion of the PSS wares from Al Mina dates from after the middle of the thirteenth century. At Kinet the dating of medieval levels—excavators have identified four phases—is based on ceramic *comparanda* and coin finds, such as the “Antiochene helmet *deniers* and the copper coins of the kingdom of Armenian Cilicia.”⁸³ While the *deniers* are tentatively dated to the 1170s (most of them are part of a hoard), the Armenian coins are more easily datable and provide confirmation for the twelfth to the early fourteenth-century dates for the occupation at medieval Kinet.⁸⁴ These copper coins issued by the Armenian kings range in date from 1198 to 1307.⁸⁵ Of the four medieval phases the first two are dated to ca. 1170-1280 and the last two are dated to ca. 1280-1310. That Phase 3 began with a reoccupation of the mound at Kinet is noteworthy. Most importantly, it is during this phase that the production of the PSS began; the increase in the trading capacity of the town is reflected in the amount of the coin finds: “the majority of the coins come from

(Ualbuquerque, 2005). NAA uses 150 to 200 mg of clay taken from the edges of 179 samples. After drying 100 mg is used in chemical analyses of 17 elements in cluster analyses that help establish different groups based on clay types. See Blackman and Redford, “Ceramics from Kinet,” 98-99 (with tables).

⁸³ *Ibid.*, 89.

⁸⁴ *Ibid.*

⁸⁵ *Ibid.*

the two uppermost layers,” that is, from phases 3 and 4.⁸⁶ Also, the last two occupation phases of the settlement contained fragments of the proto-maiolica from Sicily or southern Italy, fine underglaze painted ceramics from Syria, Zeuxippus wares (how many with respect to the remaining pottery is not specified), sgraffito wares from Tripoli, Lebanon and Venetian bowls.⁸⁷ The Aegean ceramics analyzed as the first group explicitly contain fine sgraffito, Green- and Brown-Painted ware, slip-painted ware, broad incised ware and *champlevés*.⁸⁸

According to the 2001 preliminary report, Group 1 pottery (30 out of a total number of 159 analyzed samples) are largely from the “initial phases,” even though they are not exclusive to the earlier layers.⁸⁹ Likewise, the original Al Mina PSS samples (47 fragments out of 159), which were “chemically and stylistically” made at Al Mina, are essentially to a greater extent drawn from the last two phases. The same observation holds true for the regional/local imitations of PSS (57/159): no kilns were found at Kinet but the samples are similar to the wares found at Epiphaneia/Kanisat 20 km north of the

⁸⁶ *Ibid.*, 90. Same conclusion is drawn in a previous article: Redford, S. Ikram, E. Parr, T. Beach, “Excavations at Medieval Kinet, Turkey: a Preliminary Report,” *ANES* 38 (2001), 69.

⁸⁷ Redford, et.al. “Excavations at Kinet,” 70.

⁸⁸ Blackman and Redford, “Ceramics from Kinet,” 96.

⁸⁹ Redford et.al, “Excavations at Kinet,” 70.

site, and like the Al Mina PSS they are recovered from the ultimate and penultimate phases.⁹⁰

Thus, we now know that the PSS and its local imitations began during the late thirteenth century while the Byzantine and Syrian imports pertain in general to the earlier period between ca. 1170-1280. Even though we are not informed exactly how many twelfth-century Byzantine or thirteenth-century Zeuxippus ware fragments (only one sample is presented in the 2001 article) were recovered from phases after 1280, it is safe to assume that the Byzantine imports declined at around the time when Kinet imported PSS and began to produce its own PSS imitations. Hence, they constitute the majority of the pottery from these layers at the site. It is important to observe that Kinet imported an unspecified portion of Byzantine sgraffitos in the twelfth century, as the fine sgraffito, Green- and Brown-Painted ware, slip-painted ware, broad incised ware and *champlevés* are essentially twelfth-century fine ware types, whereas the Zeuxippus wares seem to have been the latest Byzantine imports to Kinet.

Excavations at Yumuktepe near Mersin (ancient Pompeiopolis) in Cilicia yielded Al Mina PSS wares which the excavators date to the “second half of the twelfth century and the first half of the thirteenth century” based primarily on Lane’s early work.⁹¹ The

⁹⁰ Blackman and Redford, 102-104.

⁹¹ Following Lane, despite Redford’s recent work, Gülgün Köroğlu writes that “the production of this group (PSS) of pottery ended when the region came under Mamluk rule in the middle of the 13th century.” See G. Köroğlu, “Glazed Pottery from Cyprus and the Hatay-Çukurova Region in the Mersin-

overall results of the excavations conducted between 1993 and 1997 are, however, more interesting by virtue of what they reveal about the eleventh to the thirteenth-century ceramic evidence there. The coin finds testify to the revival of the area in the late tenth century. Of the eighteen identifiable coins recovered during the 1993-1997 seasons, all except one date after 970. Of the remaining, fourteen date from the period between 1030 and 1081, and nine were issued after 1050.⁹² Late eleventh-century coin finds loom large among the total number of coins after the 2007 excavations when sixteen more coins issued under Michael VII Doukas (1071-1078) were recovered.⁹³ No Armenian issues are mentioned, and only three Crusader coins were found between 2002 and 2007.⁹⁴ The occupation phases during the Middle Ages are thus divided into four: the uppermost layers are destroyed; the first datable phase is from the thirteenth century (Phase 1= ca. 1200-1250).⁹⁵ Next, Phase 1a begins with the last quarter of the eleventh century and ends ca. 1150, and finally, Phase 1b is dated to ca.1000-1070. Köroğlu proposes that the Byzantines founded Yumuktepe sometime at the end of the tenth or the beginning of

Yumuktepe Excavations," in Çanak. *Late Antique and Medieval Pottery*, 445. Redford et. al. claim that the production of the PSS at Kinet began after 1268.

⁹² O. Tekin, "Byzantine Coins from Yumuk Tepe," *Anatolia Antiqua* 6 (1998), 273-278.

⁹³ Personal communication from Prof. G. Köroğlu in 2008.

⁹⁴ Personal communication from Prof. G. Köroğlu in 2008.

⁹⁵ No coin finds are mentioned; if no coin is derived from this layer than the pottery might have been used to provide these approximate dates. I understand that the Köroğlus think that the PSS are from this phase.

the eleventh century which corresponds to the earlier period within Phase 1b.⁹⁶ So far five groups of pottery have been identified at the site; of these the majority belongs to red/brown fabric brittle ware, similar to the ones recovered at excavations in Kinet, Paphos and Hagia Moni in Cyprus.⁹⁷ The group identified as “significant,” comprises glazed pottery, of the type known as Aegean Ware. This group also contains samples of sgraffito, *champlevé*, slip-painted wares, duochrome and monochrome glazed wares.⁹⁸ The remaining groups comprise the PSS, Cypriot wares dating from mid- twelfth to the thirteenth centuries and Islamic pottery.⁹⁹ The earliest sgraffitos and the *champlevés* at Yumuktepe are dated to the late-eleventh and early twelfth centuries and are recovered from Phases 1a and 1 with contemporary coin finds confirming a late eleventh- and early twelfth-century date for these wares. As for the latest level, no mention is made of coins recovered from there; the dating of the PSS (whether the PSS are local or imported is not specified) and other contemporary glazed pottery seems to have been based primarily on the dating of these wares at neighboring sites. Most importantly, we are still in the dark about the relationship between the late eleventh- and twelfth-century

⁹⁶ The stratigraphy slightly differs in my e-mail correspondence in 2010 with the excavator from the publication of these phases in 1998: ed. K. Köroğlu, 5. *Yılında Yumuktepe, The Fifth Anniversary of the Excavations at Yumuktepe (1993-1997)*, (Istanbul, 1998), 13-14. Prof. G. Köroğlu confirmed that the interpretation of the stratigraphy changed slightly since 1998 in her e-mail.

⁹⁷ None of the wares she gives references in the other sites are specifically dated, except for fig. 24 in Megaw’s publication on Paphos which is a cooking pot dated by Megaw to the “early thirteenth century.” Megaw, “Supplementary Excavations on a Castle Site at Paphos,” *DOP* 26 (1972), 322-343.

⁹⁸ Köroğlu, “Glazed Pottery,” 444.

⁹⁹ *Ibid.*

Byzantine pottery and the Syrian pottery that dominated the ceramic scene at Yumuktepe sometime in the thirteenth century. It seems, however, that both at Kinet and at Yumuktepe Byzantine fine ceramic ware imports continued from the twelfth century into the thirteenth, with the Zeuxippus wares representing the latest phases of these Byzantine imports.

Gritille is south-east of modern Malatya (Melitene) and north of Urfa (Edessa), 10 km upstream from the main settlement of the region, Samsat (Samosata) and almost directly across from another major mound at Lidar.¹⁰⁰ The final phase of habitation at the site is dated, on the basis of numismatic and stratigraphical evidence, to the middle of the thirteenth century. It is worth noting that even though the totality of the site was excavated, the complete medieval sequence was uncovered only in the west end of the mound (80x40 meters). The west end is bordered by the fortification wall that ran along it.¹⁰¹ Since the full sequence of ceramics is from this area of the excavation, the corpus of the Gritille ceramics was analyzed based on the samples from the west end. In other words, the west end was chosen because it “represented the largest exposure, the greatest depth and in places, the complete sequence of medieval occupation.”¹⁰² Over

¹⁰⁰ Redford, *The Archaeology of the Frontier in the Medieval Near East: Excavations at Gritille, Turkey*, Archaeological Institute of America, Monographs, New Series 3 (Philadelphia, 1998), 5-7.

¹⁰¹ *Ibid.*, 35-37.

¹⁰² *Ibid.*, 70.

3,200 potsherds (both glazed and unglazed) are analyzed by Redford in 8 phases.¹⁰³ The Byzantine withdrawal from the area after the 1070s is marked by the presence of only one coin issued by Michael Doukas (1071-1078).¹⁰⁴ Of the 111 coin finds only 48 were identifiable and not counting Justinian's and Michael Doukas' issues (one each), the 8 coins identified as Byzantine are in fact Byzantine *folles* with Arabic counter stamps.¹⁰⁵ Coins thus support the claim that Gritille was first fortified in the "mid-eleventh century and soon abandoned," and that it was refortified about a century later near the end of the Crusader county of Edessa.¹⁰⁶ Hence, the bulk of the pottery at Gritille comes from four phases divided accordingly: Phase 5 corresponds to ca. 1150-1180, Phase 6 to 1180-1200, Phase 7 1200-1220 and Phase 8 to 1220-1240.¹⁰⁷ Overall, 78 percent of the pottery has orange fabric, 16 percent cream to tan fabric, 2 percent red to brown, 1 percent brown, 2 percent dark brown with glaze types including turquoise, manganese (i.e. purple), opacified green, opacified yellow, opacified brown, blue, green and dark brown.¹⁰⁸ The size of ceramic finds grow after the end of the eleventh century: Phases 2 through 4 had less than four unspecified ceramic fragments each. Phase 5 had 15

¹⁰³ *Ibid.*

¹⁰⁴ *Ibid.*, 11, 160. Attributes the coin to the 13th century level after noting that the coin was "pocketed by a workman" hence removed out of its context before it was registered.

¹⁰⁵ *Ibid.* 159-160. These coins were re-circulated by the Artuqid or Mamluk governors, according to Redford.

¹⁰⁶ Blackman and Redford, "Calcerous Clay Ceramics from Gritille, Turkey," *Muqarnas* 11 (1994), 31.

¹⁰⁷ Redford, *Excavations at Gritille*, 157.

¹⁰⁸ *Ibid.*, 107.

percent and Phase 6 had 21 percent of the total pottery while the rate rises to 47 percent in Phase 7. With Phase 7, around 1200-1220, the tripod marks on the wares begin to appear.¹⁰⁹ The first samples of “sgraffiato”¹¹⁰ appeared in Phase 5, but the style is most prevalent in Phase 7 (50 percent).¹¹¹ It is significant how the introduction of tripods changed the overall size of the ceramic evidence: 97 percent of the ceramics date from phases in Gritille that date from after tripod marks begin appearing on the ceramics.

The proportion of both the fine and coarse wares were high phases 7 and 8 compared to the previous phases. It is very important to note, however, that the locally produced Gritille glazed wares belong to the North Syrian category; the prevalence of turquoise glaze (50 percent) is a clear indication of this fact.¹¹² At Gritille, Redford observes a “complex system of local and regional production,” among which the pottery from Samosata looms large. Most important for our purposes, however, is that in this complex system of local production linked to regional trade, the Byzantine wares did not display a noteworthy presence: by the time this site on the Euphrates was reoccupied during the mid-twelfth century following the demise of Byzantine rule during the latter half of the eleventh century, it was supplied by Syrian-type pottery,

¹⁰⁹ *Ibid.*, 108-109.

¹¹⁰ I would call this type of pottery “incised ware” since the incisions are made directly on the red body and not on white slip as is the case in sgraffito.

¹¹¹ *Ibid.* 109.

¹¹² *Ibid.*, 111. Manganese glaze comprises 30 percent of the total.

not Byzantine. This observation is unlike what we have recently seen in Al Mina, Yumuktepe and Kinet, all port towns in Cilicia and Syria. It seems that in inland locations away from centers of regional or interregional trade like Gritille and Korucutepe Byzantine imports were few or non-existent.

Most of the evidence from the nearby sites in the region confirms this statement. A survey and excavation of 47 sites in south eastern Turkey, or more precisely at Kurban Höyük, near Urfa (Edessa), revealed a total of eight sites covering a total of 8 ha, which are dated to the “medieval period,” that is, to the period between the eleventh and the thirteenth centuries.¹¹³ The medieval sites here were 2 to 4 km apart, dotted along the banks of the Euphrates. The dating of the sites and the finds are based on “cross-referencing” the coin-dated, excavated assemblages from Gritille.¹¹⁴ Occupation of these eight medieval sites is thought to have continued without disruption into the succeeding Ayyubid period which began in the middle of the thirteenth century.¹¹⁵ The glazed wares recovered from these medieval occupation contexts include polychrome glazed pottery with broad incisions, and Wilkinson notes

¹¹³ T. J. Wilkinson, *Town and Country in Southeastern Anatolia vol I Settlement and Land Use at Kurban Höyük and Other Sites in the Lower Karababa Basin*, (Chicago, 1991), 129. The medieval period coincides with the Crusader County of Edessa (1098-1144).

¹¹⁴ *Ibid.*

¹¹⁵ *Ibid.*, 133.

that these are “identical to those from Gritille.”¹¹⁶ The proposition that the eastern part of Asia Minor bordering Syria was supplied by local wares or imports predominantly from Syria is reflected in a survey of the Harran plain (44km southeast of Urfa) where “medieval” is used as a synonym for “Islamic.”¹¹⁷

The earliest medieval levels at Aşvan Kale (ancient Sophene), northwest of Elazığ, produced the first instances of glazed pottery, all of which are decorated with monochrome or duochrome metallic glazes and “none of them carries the sgraffito designs,” so characteristic of the medieval level above it.¹¹⁸ The level above it yielded 23 coins; 12 of these copper *folles* date from the period between 978 and 1042, the remaining date up to the end of the reign of Michael Doukas in 1078. Based on the evidence of these coins, the pits and pottery kilns (one of them with a coin of Constantine X and Eudokia from 1059-1069) found at the center and towards the south side of the mound at Aşvan Kale, Mitchell proposes that this ceramic-producing complex was constructed some time in the second quarter of the eleventh century. Mitchell also deduces that the site continued to produce ceramics for more than half a

¹¹⁶ Sites 23 and 35 are discussed on *ibid.*, 252. For site 8 and 17,18, 29, 43-44 see *Ibid.*, 268, 280 respectively.

¹¹⁷ However, no discussion on the pottery is made. For a list of glazed, incised wares see N. Yardımcı, *Harran Ovası Yüzey Araştırması. Archaeological Survey of the Harran Plain* (Istanbul, 2004), vol. I, 104, 123, 216; vol. II, 478, 487, 541.

¹¹⁸ S. Mitchell, *Aşvan Kale Keban Rescue Excavations, Eastern Anatolia* (Oxford, 1980), 49.

century.¹¹⁹ One should add, however, that the latest coin of 1071-1078 does not indicate that the kilns fell out of use after that date, as the sgraffito wares which appeared first in this Medieval II level continued into the period referred to as Medieval III even though much of these wares was “a relic of the earlier Medieval II period.”¹²⁰ The lusterware and the coins of the Ilkhanid ruler Abu Said (1306-1335) and another coin from 1328-1332, mark the *terminus post quem* for the abandonment and destruction of the site and with it the kilns.¹²¹ According to Mitchell, the pottery of the second medieval level “bears out a later date” in the eleventh century for Medieval II, because a greater portion of it shows a strong Persian or Seljuk influence.¹²² “Indeed, all of the abstract sgraffito designs on the glazed ware seem Islamic in inspiration,” and therefore, the kilns cannot be much “earlier than the last quarter of the eleventh century.”¹²³ The evidence, therefore, points to the establishment of kilns at the site sometime after 1025 and they continued to function through the fourteenth century. The excavators note that most of the wares found at Aşvan Kale are executed in an “eastern” style, though it is hard for the reader to conclusively distinguish stylistic differences based on the images

¹¹⁹ *Ibid.*, 53.

¹²⁰ *Ibid.*, 57.

¹²¹ *Ibid.*, 59.

¹²² *Ibid.*, 55.

¹²³ *Ibid.*

in the appendix.¹²⁴ We see here another inland site that seems to have lost all commercial links with Byzantium beginning around the last decades of the eleventh century. Both the coin and ceramic evidence confirm this picture.

The pottery and the coin evidence unearthed during the excavations at Taşkun Kale just south of Aşvan Kale presents a similar scene. Here too, apart from a single Byzantine coin from the reign of Basil II or Constantine VIII (976-1028), all out of a total of eight identifiable coins are Ilkhanid, with four minted during the reign of Abu Said (1316-1335).¹²⁵ This site delivered a total of 141 pieces of glazed pottery fifty-eight percent of which are incised. *Champlevé* ware is rare, representing only two percent of the total. Incised decorations involved geometric, semi-abstract motifs with criss-cross patterns, whorls, scale patterns and basketry; they are, in short, similar to the pottery recovered from Aşvan Kale.¹²⁶ Taşkun Kale was supplied by non-Byzantine, eastern wares from the eleventh century on. Once again, loss of political control appears to coincide with the changes in pottery types and supply circuits at this site, not unlike Gritille, Aşvan Kale, and Korucutepe, but certainly distinct from the observations we have made regarding the port towns Al Mina, Kinet and Yumuktepe.

¹²⁴ For black and white drawings of the fine glazed pottery see *ibid.*, 161-207. There are a few pieces that seem closer to their Byzantine counterparts such as the bowls 841, 844 on p. 186.

¹²⁵ A. McNicoll, *Taşkun Kale Keban Rescue Excavations Eastern Anatolia*, BAR Series Monograph no. 6, BAR International Series no. 168, (London, 1983), 19.

¹²⁶ *Ibid.*, 60-65.

South of Aşvan and Taşkun Kale, pottery finds from Tille Höyük are largely dated to the twelfth and thirteenth centuries.¹²⁷ There are only six identifiable coins from after the eighth century (there is only one Abbasid coin from the eighth century), four of them are eleventh century Byzantine (date range: 1042-1070) coins. In addition, there is one French *denier* of William I Raymond (1190-1195), and one late-fourteenth-century Venetian *grosso* recovered from the cistern.¹²⁸ Of the 358 fragments of medieval pottery a great majority are not Byzantine, including the sgraffitos nos. 286-299 (all fourteen are bowls recovered from the backfill of the cistern; Byzantine wares are not present among the occupation deposits at this site) and a few other fragments present “in the final medieval deposits.” These incised sgraffito ware fragments do not bear white but red or orange slip: hence they lack the characteristic red body and white slip that are trademarks of the Byzantine sgraffito.¹²⁹ Furthermore, there are glazed potsherds without slip, samples of Hama and Raqqa wares, luster wares and many other glazed wares not associated with a specific style or region but that have blue, turquoise glaze on a white body.¹³⁰ Thus Tille Höyük, like Aşvan Kale and Taşkun Kale, seems not to have imported Byzantine sgraffito wares at all. Moreover, in view of the

¹²⁷ J. Moore, *Tille Hoyuk 1 The Medieval Period*, The British Institute of Archeology at Ankara Monographs no. 14 (Oxford, 1993), 71ff.

¹²⁸ *Ibid.*, 179-180.

¹²⁹ *Ibid.*, 72.

¹³⁰ See the pottery catalogue *ibid.*, 75-91.

evidence from the above mentioned sites, this phenomenon of no Byzantine imports seems to have taken place since ca. eleventh century. The presence of the Byzantine wares seems to have been limited to the coastal sites Kinet, Yumuktepe and Anemurium/Aphrodisias (not discussed here),¹³¹ all of which served as important ports in Cilicia.

Pottery from the sites in the vicinity of Samosata, specifically from Arsameia (modern Eski Kahta) was imported from the east—the authors refer to these as Samarra- type wares—while the eleventh- to thirteenth-century pottery is identified as Raqqa ware. Rusafa ware, as well as samples of early Ottoman white-bodied Milet wares, are also present among the finds.¹³² Only seven broken fragments of polychrome sgraffito ware are identified; they are chalky, sandy, orange in color, and covered in white slip under a yellow glaze. The decorations include floral designs, spirals, grid motifs, interlocking circles and scales. In view of their small number with respect to the rest of the pottery, these sgraffito wares are assumed to be imports.¹³³ Lale Bulut, in her study of the medieval Samosata ceramics, cites similar sources for the fine wares

¹³¹ Anemurion/Aphrodisias is not discussed because the evidence on it is few, and the dating is based completely on *comparanda* from other sites. However, according to the list of finds provided in the dissertation, the site revealed twelfth-century Byzantine sgraffitos, Zeuxippus and PSS wares. See, T. A. Tomory, *A Study of Medieval Glazed Pottery from Aphrodisias and Cilicia*. Unpublished PhD thesis, University of Toronto, 1980.

¹³² F. K. Dorner, T. Goell, *Arsameia am Nymphaios. Die Ausgrabungen im Hierothesion des Mithradates Kallinikos von 1953-1956* (Berlin, 1963), 248.

¹³³ *Ibid.* *Comparanda* are not given.

excavated there. Her observations are based only on the decorative techniques and the motif repertoire of the pottery: Samosata ceramics follow the technical specificities (especially in terms of the different colors used in glaze, as well as the painting techniques) and motifs of fine pottery from Rusafa, Hama and Raqqa.¹³⁴

Thus Samosata, Tille Höyük, Aşvan Kale, Gritille, Taşkun Kale, Arsameia and Korucutepe all seem to have been importing and/or producing non-Byzantine, Syrian wares during the eleventh century. Evidence from these sites suggests that in the above cases this was true possibly as early as the eleventh century, a trend which continued into the thirteenth century. At Yumuktepe and Kinet, on the other hand, both port towns, the Byzantine imports die out in the thirteenth century when the region completely turned to Syrian imports, in particular the PSS wares and their locally produced versions, as one can deduce most conclusively from the excavations at Kinet.

The medieval pottery at Alahan, southeast of modern Karaman, consists of small sgraffito wares and plain glazed wares, found often on or near the surface. All the potsherds are fragmentary but they indicate partial reoccupation of the site “from the twelfth through the fourteenth century” on the basis of the presence of sgraffito wares recovered from the surface or levels near the surface.¹³⁵ After a gap following the seventh century, coin evidence suggests that there was little revival; of the total number

¹³⁴ L. Bulut, *Samsat Ortaçağ Seramikleri: Lüster ve Sıralılar* (Izmir, 2000), 12-17.

¹³⁵ M. Gough, *Alahan. An Early Christian Monastery in Southern Turkey* (Wetteren, 1985), 52.

of 113 coins, only six postdate the seventh century and of the six five are referred to as “Turkish” without specific dates.¹³⁶ There is a single anonymous copper *folles* dating from 1030/35-1042.¹³⁷ Overall, less than fifty sgraffito fragments are recorded. They exhibit an olive green glaze on the interior only. The fabric of these fragments is very light brown, full of white lime particles and dark grits. Other fragments have a green glaze with brown and grey-black coloring in the incisions.¹³⁸ Alahan was site of a Byzantine monastic complex the last phase of whose occupation is marked by the surviving copper anonymous *folles*.¹³⁹ The site yielded, unsurprisingly, no Constantinopolitan White Ware. The site’s function, and looting in the recent centuries might account for lack of supportive numismatic evidence for the author’s assumed dating of its reoccupation to the twelfth century lasting until the fourteenth, especially in view of the presence of the sgraffitos at the uppermost levels most vulnerable to vandalism. There is no further discussion of the sgraffitos; it is impossible to discern what kind of sgraffito wares actually were found there. Alahan was certainly not a production site and one can make little sense from the few fragments regarding the dates of the ceramic finds, as they might range anywhere between the eleventh and the fourteenth century. However, the site seems to confirm the end of the Byzantine

¹³⁶ *Ibid.*, 27.

¹³⁷ *Ibid.*

¹³⁸ C. Williams, “The Pottery and Glass at Alahan,” in ed. Gough, *Alahan*, 53.

¹³⁹ *Ibid.*, 27.

occupation at the end of the eleventh century, and when it was occupied again from the twelfth century on and began importing sgraffito wares, these were likely, though not certainly, imported from Byzantium.

The usual practice among archaeologists is to date settlements, castles, etc. on the basis of ceramic finds, especially if there is no other evidence to assist with the dating. However, when the dating of pottery itself is not well established, this practice proves to be less helpful. This is true, for example, for the finds from a Crusader Castle in Cilicia, which is currently buried under the waters of the Aslantaş Dam.¹⁴⁰ The castle is dated to the tenth and eleventh centuries on the basis of the Constantinopolitan White Ware Group 2 fragments (of the 50-60 percent of the glazed fine wares) while the later occupation of the castle is dated, on the basis of Al Mina PSS wares found at the site (40-50 percent of the glazed fine wares), to the early thirteenth century. This assumption, in turn, is based on the other assumption that the Al Mina wares were produced by the Crusaders. All of these suppositions—first, the dating of the Al Mina wares; second, that the Al Mina PSS were produced “by the Crusaders”—need to be revised. As we have seen in Kinet, for example, the PSS were locally produced, and not necessarily by the Crusaders, nor was its production of PSS wares occurring in the early thirteenth

¹⁴⁰ A. Sabuncu-Toydemir, “Çukurova, Osmaniye İli, Ceyhan Nehri Yakınında, Aslantaş Baraj Suları Altında Kalmış olan Haçlı Kalesi Kumkale’nin Seramik Buluntuları” in ed. Ch. Bakirtzis, *Congrès international sur la céramique médiévale en Méditerranée* (Athens, 2003) 253-238.

century.¹⁴¹ Unlike Kinet, however, and similar to the other inland sites, the castle at Aslantaş Dam evinced no Byzantine sgraffitos from after the eleventh century. This confirms that both politically and economically the site was no longer a part of the empire and its trade links did not extend to regional levels.

The Seljuk palace in Alanya was held by a certain Kyr Fard (or Vart, possibly an Armenian) in the thirteenth century before it was taken by Alaeddin I Keykubad in 1221. Before then it was in the possession of Seljuk Turks since the 1070s and the city may have been taken back by John II during his expedition in 1120 in the direction of Attaleia before it fell under Armenian control possibly after 1204.¹⁴² The sgraffito wares excavated there have been divided into three groups.¹⁴³ All of the Byzantine sgraffito wares recovered from the site, first of all, are made from the same type of reddish clay, which led the excavators to conclude that these were locally produced.¹⁴⁴ Further, they are all white-slipped, glazed wares, which are additional qualities that remain unchanged in all three groups. This classification into three distinct groups, therefore, is

¹⁴¹ Redford, "Port Saint Symeon Seramiği Denilen Hatay ve Çukurova Bölgesi Sgraffito Seramiği" in *V. Ortaçağ Türk Dönemi Kazı ve Araştırmaları Sempozyumu* (Ankara, 2001), 485-490; *idem*, "On Saqis and Ceramics: Systems of Representation in the Northeast Mediterranean," in eds. D. H. Weiss and L. Mahoney, *France and the Holy Land. Frankish Culture at the End of the Crusades* (Baltimore, 2004), 282-312.

¹⁴² S. Vryonis, "Nomadization and Islamization in Asia Minor," *DOP* 29 (1975), 45; Redford, "City Building in Seljuq Rum," in C. Lange and S. Mecit, eds., *The Seljuks. Politics, Society and Culture* (Edinburgh, 2011), 256-263.

¹⁴³ S. Bilici, "Alanya- Selçuklu Sarayı Seramikleri" *Uluslararası Sanat Tarihi Sempozyumu Prof. Dr Gönül Oney'e Armağan* (İzmir, 2002), 139.

¹⁴⁴ *Ibid*, 140.

based exclusively on the different decorative styles applied on these red-bodied white-slipped wares. The first group appears to have been an early type of Byzantine sgraffito that contains a central medallion surrounded by palmettes and geometric designs, while the second group repeats the same motifs in *champlevé* and it has green glaze as opposed to the yellow glaze of the first group. The next layer contained the white-bodied Turkish Milet wares, which Bilici dates to the fifteenth century, but it also contained the yellow-glazed white-slipped sgraffitos “which may have been made by Syrian potters.”¹⁴⁵ In the absence of the White Wares from the capital, which helps identify continuity in the occupation of the site all the way back to the seventh-eighth centuries in other locations, or coins, or any other contextual evidence, Bilici tentatively concludes, based on ceramic evidence alone, that the Byzantine sgraffitos were either produced in the vicinity of or imported to the palace structure throughout the twelfth century, until 1221 when it was taken for the last time by the Seljuks.¹⁴⁶ Since the city changed hands many times over the course of two centuries both explanations are possible. There is no viable reason for concluding that the sgraffito imports to the site stopped after the Seljuk conquest, and regrettably, the author does not discuss the types, quantity and sequence of these post-twelfth-century sgraffitos. As in Alahan,

¹⁴⁵ *Ibid.*, 146.

¹⁴⁶ For the excavations in the palace see O. Arık, “Alanya Kalesi 2001 Yılı Çalışmaları,” *KST* 24. 2 (2002), 521-522. The only reference to coin finds is in *idem*, “Alanya Kalesi 2004 Yılı Çalışmaları,” *KST* 27. 2 (2005), 215. Ancient, Byzantine and Seljuk coins are all poorly preserved.

here too we are in the dark about the dating of the different kind of sgraffitos and their relation to each other within the pottery find as a whole as well as their temporal sequence. Yet, Alanya, where the Seljuk palace was situated, was a significant port city on the southwestern coast of Asia Minor; the site held Byzantine sgraffitos and *champlevés* in its twelfth-century layers. It is unfortunate that we do not know the later history of the ceramics from the site, except that they were similar to the wares made by the Syrian potters, as Bilici pointed out. Based on what we currently know about the ceramics discussed in Bilici's work, it seems that the Byzantine production or the imports to the site were cut after the Seljuk takeover when the city turned to importing pottery from the east. This conclusion needs to be confirmed when Bilici discusses the thirteenth-century ware types in more detail. Nevertheless, the lack of references to Zeuxippus type wares, coupled with the presence of the Syrian ware types, makes Bilici's overall conclusions acceptable.

Our next site, Sagalassos, is about 180km inland northwest of Alanya. Because both Alanya and Sagalassos share a similar time-line with respect to their occupation history, it makes sense to study their evidence in a comparative perspective. Unlike Alanya, because it has not been continuously occupied, Sagalassos's Byzantine ceramic evidence lends itself to a fuller analysis, sequencing and relative dating of its ceramics finds. At the outset, these two interrelated facts about Sagalassos' history need to be stated: First, that the city was taken by the Seljuks at an unknown date in the thirteenth

century. Second, there are no Zeuxippus wares on this site. As we will remember from the discussion of Zeuxippus wares at other sites, in particular Hayes' excellent discussion of Saraçhane ceramics, these wares appear in Saraçhane layers around 1200 as the latest ceramic group that appears there. Based on these two facts I argue that Sagalassos gives us a good control case of the types of fine wares that existed before ca. 1200.

Although the authors of one of the most recent articles of the latest Byzantine occupation layers at Sagalassos claim that they are studying "a 12th-and 13th-century A.D. ceramic assemblage from Alexander's Hill" the ceramics, I argue, pertain to the period before the thirteenth century.¹⁴⁷ Alexander's Hill itself is dated to the Middle-Byzantine period (ninth-eleventh centuries); furthermore, in the twelfth century a fortress was built there, presumably to guard against Seljuk attacks. The evidence for the faunal remains suggested to the authors that the hill was used as a military garrison of some sort.¹⁴⁸ The site was ultimately destroyed by the Seljuks in the next century. In

¹⁴⁷ A. K. Vionis, J. Poblome, B. De Cupere, M. Waelkens, "A Middle-Late Byzantine Pottery Assemblage from Sagalassos: Typo-Chronology and Sociocultural Interpretation," *Hesperia* 79. 3 (2010), 423. Also see, H. Vanhaverbeke, "The Evolution of the Settlement Pattern. The Early Byzantine Period and The Middle Byzantine, Late Byzantine/Selçuk, Ottoman and Recent Periods," in H. Vanhaverbeke and M. Waelkens, *The Chora of Sagalassos. The Evolution of the Settlement Pattern from Prehistoric until Recent Times* (Tunhout, 2003), 285-326; A. Vionis, J. Poblome and M. Waelkens, "Ceramic Continuity and Daily life in Medieval Sagalassos, sw Anatolia (ca. 650-1250)," in T. Vorderstrasse and J. Roodenberg, eds., *PIHANS* 113 (Leiden, 2009), 191-209.

¹⁴⁸ "The faunal material from the 12th-13th century at Alexander's Hill (AH) is quite different from the Roman and Late Antique remains recovered within the city of Sagalassos. The animals most frequently consumed within the city were ovicaprines (41.1 percent), followed by cattle (35.2 percent) and pig (22.9

short, we would expect to see Middle-Byzantine pottery up to the end of the twelfth century. And that is exactly what we find on Alexander's Hill.

Questions were raised during the course of excavations at Sagalassos and Alexander's Hill, such as whether the Middle Byzantine unglazed common wares and glazed tablewares were produced locally or were imported. Unpublished fabric analyses have revealed that the glazed wares, and more surprisingly the majority of the common-ware vessels, were made outside the territory of Sagalassos. The presence of Constantinopolitan types that we know well from Hayes' study, such as the Glazed White Ware Group 1 (early ninth century) and Group 2 (early twelfth century) are attested among the finds. The fact that even the common wares were imports, strengthens the argument that we are faced with a military structure controlled or supplied from or via the capital. Furthermore, "there is no evidence for the production of glazed vessels at Sagalassos or within its territory."¹⁴⁹

percent). On AH, by contrast, cattle bones are dominant, followed by pig; also, while red deer and fallow deer are relatively abundant in the AH material, they are less so in the earlier material from Sagalassos. The increased proportion of red deer and fallow deer may point to a change in vegetation: because deer prefer landscapes that include forested sections, it is possible that the environment around AH was much more wooded during the twelfth and the thirteenth century than it had been in Roman and Late Antique periods. Overall, it seems that the population living on AH in Middle-Late Byzantine times preferred animals with a high meat yield; sheep and goats would provide much less meat than cattle, pigs, or deer." This preference for high-yield meat sources is a feature suggesting that AH was a military outpost. The historical circumstances and the imports on the Hill, are other factors in favor of a garrison-like structure. Vionis, et. al., "A Middle-Late Byzantine Pottery Assemblage from Sagalassos," *Hesperia* 79. 3 (2010), 456.

¹⁴⁹ *Ibid.*, 444.

For our purposes, the more interesting part of the ceramic material concerns the glazed wares themselves. All of these fine wares are *par excellence* from the twelfth-century: incised sgraffitos, *champlevé* ware, as well as the earlier Green- and Brown-Painted Ware and the slip-painted wares which all together constitute overall ninety percent of the glazed wares.¹⁵⁰ All of these red-bodied, lead-glazed fine wares have been decorated with designs either painted in white slip (the Slip-Painted ware), or they have been covered with a whitish slip and decorated with designs either scratched with a blunt tool (sgraffito ware) or painted (Green- and Brown-Painted Ware). The fabric of each group of glazed decorated wares is different, suggesting different geological sources and probably different production centers. Within the red-bodied, lead-glazed fine ware group the most common glazed types on Alexander's Hill are the sgraffito wares and the *champlevés*.¹⁵¹ From other sites, including those in Constantinople, Corinth and Athens which we will discuss in the next chapters, we can argue that the Green- and Brown-Painted wares and Slip-Painted wares appear earlier than the rest of the red-bodied, lead-glazed fine wares, in the late eleventh and the twelfth centuries, while the *champlevés* are dated to ca. 1150. The remaining sgraffitos could in theory be from either end of the twelfth century but the fact that there are no Aegean wares or

¹⁵⁰ *Ibid.*, 447.

¹⁵¹ *Ibid.*, 444-445.

Zeuxippus wares at this sites strongly argues for a cut-off date of Byzantine ceramic supply ca. 1200.

At Amorium, excavations in the interior of the triangular tower, whose construction is dendrochronologically dated to 487, revealed Late Roman fine and coarse wares. The pottery from right before the Arab attack of 838 contained fine red wares sometimes decorated with red ribbons (which Böhlendorf-Arslan designates as the “local” pottery), and coarse wares.¹⁵² After an interval, the tower area was reoccupied during the ninth-tenth centuries. The pottery from this latest context includes fine red wares, red and coarse grey wares and extremely rough coarse wares, as well as a small fragment of Constantinopolitan Glazed White Ware Group 2.¹⁵³ Excavations in the vicinity of the gateway reveal that after the abandonment of the city wall area, new houses were built inside the wall. Since numerous anonymous and signed *folles* of the late tenth and the eleventh century have been found in this area of the excavation, including a gold *nomisma* of Constantine X (1059-1067), these layers cannot be dated to earlier than the eleventh century.¹⁵⁴ Again in this area, a large

¹⁵² For Amorium in general see B. Böhlendorf-Arslan, *Glasierte byzantinische Keramik aus der Türkei*, (Istanbul, 2004), vol 1. 222-224. Böhlendorf-Arslan, “Stratified Byzantine Pottery from the City Wall in the Southwestern Sector of Amorium,” in *Çanak. Late Antique and Medieval Pottery and Tiles in Mediterranean Archeological Contexts*, Beate Böhlendorf Arslan, Hanna Witte Orr, Ali Osman Uysal, eds., (Istanbul, 2007), 273-294.

¹⁵³ Böhlendorf-Arslan, “Stratified Byzantine Pottery,” 281. Amorium fell to the Turks in 1116.

¹⁵⁴ C. Lightfoot and E. Ivison, “Introduction,” in ed. M. A. V. Gill, *Amorium Reports, Finds I: The Glass (1987-1997)*, (London, 2002), 13.

amount of pottery was found *in situ*, of which nearly a third consists of flat-bottomed cooking pots, while the rest are polished fine red-bodied and fine beige wares, of unspecified provenance, as well as some local glazed pottery.¹⁵⁵ Overall, out of the eighty potsherds studied by Böhlendorf-Arslan, only two are Glazed White Wares; the majority of the pottery is thought to have been made in Amorium, considering the presence of kilns (not yet studied) and wasters in the Upper City.¹⁵⁶ According to Böhlendorf-Arslan, the red-bodied, red-ribboned wares were locally produced in the eleventh century, since they form the bulk of the finds in the city before its capture by the Turks. The imported Constantinopolitan White Wares constitute, on the other hand, only a very small portion (2.5 percent) of the wares so far studied.¹⁵⁷ Moreover, none of these early wares are covered in white slip, which seems to have been a phenomenon of the late eleventh century at other sites. Future excavations particularly at the kiln sites and the Upper City mound may refine the dates. There is no obvious reason why, once conquered by the Seljuks ca. 1116, Amorium would cease to import even a small amount of fine Byzantine pottery, yet there is no evidence of it. We should remember that Byzantine sgraffitos were not present in any of the eastern sites we have looked at

¹⁵⁵ Böhlendorf-Arslan, "Stratified Byzantine Pottery," 282-284.

¹⁵⁶ *Ibid.*, 291-292.

¹⁵⁷ The scarcity of the White Ware is a common phenomenon. Kaman Kalehöyük southeast of Ankara revealed only four White Ware sherds. These wares are significant in suggesting contact with the capital and its hinterland. For Kaman Kalehöyük see Vroom, "Some Byzantine Finds from Kaman Kalehöyük. First Observation," *Anatolian Archaeological Studies* 15 (2006), 163-169. Vroom writes that until the excavations at Kaman Kalehöyük the easternmost White Ware finds came from the Amorium excavation. Yet, Lane too refers to a few sherds at Al Mina.

so far (Alahan, Tille Höyük, Avşar Höyük, Aslantaş Dam, Korucutepe, Gritille) except for the Syrian port towns Al Mina and Kinet as well as the Cilician port at Yumuktepe.

Karacahisar Castle lies between Nicaea and Amorium and is taken to be one of the important military posts overlooking the whole plain of Doryleion (modern Eskişehir). Excavations started there in 1999 and they yielded many ceramic finds in and outside the castle. The problem with the dating of the pottery at this site is one which we encounter at other sites where ceramics constitute the basis for dating: the ceramic evidence is used to date the castle rather than the context of the finds from the castle being used to date the ceramics. As a result, Parman notes the presence of the “late” Byzantine glazed sgraffito wares, slip painted wares and the early Ottoman Milet wares on site and dates the castle to the period between the eleventh and the thirteenth centuries.¹⁵⁸ The presence of the Byzantine sgraffitos, even though the dating needs to be refined, is noteworthy on a Komnenian military post which was recaptured from the Turks ca. 1175 by Manuel I and lost again the following year.¹⁵⁹ Also significant is the absence of imports from the east; Parman, a ceramic specialist who worked at various

¹⁵⁸ E. Parman, “Eskişehir-Karacahisar Kalesi 2001 Yılı Kazı Çalışmaları,” *KST* 24. 2 (2002), 69-80.

¹⁵⁹ Note that the finds might postdate these dates which are not from the Karacahisar Kale but from Dorylaion. See A. Stone, “Dorylaion Revisited. Manuel I Komnenos and the Refortification of Dorylaion and Soublaion in 1175,” *REB* 61 (2003), 183-199. Stone argues that the dating is not certain, nor is the location: the sources do not agree whether Kılıçarslan obliged Manuel to destroy the fortification of Dorylaion or Soublaion in 1176, because, where Niketas Choniates writes about Doryleion, another contemporary historian, Euthymios, refers to Soublaion (in the vicinity of Choma, modern Honaz, about 250km southwest of Dorylaion).

medieval sites in Turkey and should have been able to recognize them, does not mention any Syrian wares at this site, particularly the characteristic PSS. Like Sagalassos and Alanya, this site yielded typical twelfth-century Byzantine fine wares, such as the Slip-Painted and the later sgraffito wares. The absence of the thirteenth-century Zeuxippus and imported PSS wares is also significant and confirm the pre-thirteenth-century end date for the Byzantine occupation of the Castle.

At Hierapolis, the tenth- and eleventh-century levels revealed the Glazed White Wares and the Polychrome Glazed wares of the capital.¹⁶⁰ By the eleventh century, “a particularly distinctive coarse clay appears to dominate in coarse pottery manufacture,” a ware that is identifiable by its red/brown fabric and mica flecks which Arthur seems to think was imported from the east.¹⁶¹ Later in the eleventh and the twelfth century, glazed ware imports, this time from elsewhere in the Byzantine empire, increase, judging from the rise in their number among the pottery deposits. This is the first period when the sgraffitos appear in Hierapolis. These sgraffitos are found together with coins dating from the late eleventh century, before a hiatus in the coin evidence, which began, Arthur postulates, with the battle of Manzikert in 1071.¹⁶² The ceramic finds that date immediately before 1210 when the Seljuk Turks took the city include

¹⁶⁰ P. Arthur, *Hierapolis. Archaeological Guide* (Istanbul, 2006), 78.

¹⁶¹ *Ibid.*, 78-80.

¹⁶² *Ibid.*, 80-81.

sgraffitos: “late Byzantine red-bodied wares, slip-decorated under a yellow/brown glaze.” The finds also revealed a kiln structure alongside sgraffito wares, although the excavators do not draw any conclusions about the relationship between the kiln and the finds, nor do they give the ratios of the different ceramic groups.¹⁶³ The “Byzantine house,” on the other hand, yielded a coin issued under Manuel I, alongside red-bodied, white slipped, glazed wares decorated in sgraffito, bearing designs such as spirals, and other geometric motifs.¹⁶⁴ Areas designated as Z 13 and Z 14 yielded samples of misfired pottery and “late Byzantine glazed ceramics.”¹⁶⁵ Above this level begin the Turkish ceramics: white clay wares with designs executed in black under a blue glaze.¹⁶⁶ Only one sgraffito ware is identified (not conclusively) as a Zeuxippus derivative.¹⁶⁷ We are not told the percentage or potsherd count of the thirteenth-century Byzantine sgraffitos within the glazed pottery as a whole. Furthermore, since the latest Byzantine

¹⁶³ S. Yılmaz, “Hierapolis Antik Kenti Tripolis Caddesi Temizlik ve Düzenleme Çalışmaları” VI. Müze Kurtarma Çalışmaları Semineri Didim 1995 (Ankara, 1996), 201.

¹⁶⁴ *Ibid.*, 201-202. Excavations in the Roman bath structure in Hierapolis, on the other hand, yielded coins issued under Michael VII Doukas, Alexios III, Izzeddin Keykavus and Alaaddin I Keykubad, but these are from a collapsed section of the bath hence the finds are mixed. See A. Ceylan, “VI. Dönem Hierapolis Roma Hamam Kazısı” 9. Müze Kurtarma Kazıları Semineri (Ankara 1999), 279. Daniela Cottica studied exclusively the slip-painted decoration from insula 104 at Hierapolis. She notes that the “middle Byzantine” levels do not have imported pottery, even though the site was certainly occupied between the seventh and the tenth centuries. She also notes that “sometime in the eleventh century the white painted decoration disappeared, replaced by applied cordons often bearing fingerprint impressions.” See Cottica, “Micaceous White Painted Ware from Insula 104 at Hierapolis/Pamukkale Turkey,” in Çanak. *Late Antique and Medieval Pottery*, 266.

¹⁶⁵ Yılmaz, “Hierapolis Antik Kenti Tripolis Caddesi,” 202.

¹⁶⁶ *Ibid.*, 203.

¹⁶⁷ Artur, *Hierapolis*, 83-84 (figure 31).

coin mentioned (that of Alexios III, who ruled between 1195 and 1203) is from the baths and is followed there by Seljuk issues may indicate that the site was still Byzantine at the opening years of the thirteenth century. Arthur assumes that Hierapolis was taken by the Seljuks in the 1220s, but judging from the absence of Nicaean coins on the site, it may have fallen to the Turks earlier.¹⁶⁸ Again, the presence of slip-painted wares and sgraffitos, accompanied with contemporary coins, confirm the twelfth-century sequence of ceramics which we are familiar with from other sites in the Asian provinces. Zeuxippus wares do not seem to have entered this site either, as the pottery of the later layers has been recognized as “thirteenth-century nomadic Seljuk” pottery.¹⁶⁹ Zeuxippus wares are prevalent at thirteenth-century sites in Asia Minor that either produced or imported them, and as our discussion shows, Hierapolis was neither a producer or an importer of these wares.

A similar deductive approach applies to the excavation in Demre (ancient Myra). The third building stage of the church correspond to the period between the eleventh and the thirteenth centuries and is based on the study of the ceramics found at the site. All of the wares are of red fabric dipped in white slip and glazed, with the slip covering only the inside of the bowls or the plates, decorated in sgraffito with geometric, floral

¹⁶⁸ *Ibid.*, 25-27.

¹⁶⁹ *Ibid.*, 85.

designs and animal motifs as well as the *champlevé*.¹⁷⁰ Of the 15,831 fragments of ceramics only 1,258 fragments are glazed ceramics. Demre did yield Constantinopolitan White Wares which Ötüken dates to the ninth and the tenth centuries. She observes that most of the glazed ceramics date to the eleventh through the thirteenth centuries, namely the “third stage” of the building’s history.¹⁷¹ Since these ceramics have similar clay make-up, she assumes that there was local production at the site, which is supported by the local tripod finds.¹⁷² The difficulty here too is the dating of the material that comes after the White Wares. The imported wares, among which Ötüken notes the presence of fine sgraffito fragments decorated with Arabic letters, are assumed to be from the eleventh through the thirteenth centuries.¹⁷³ In short, the pottery is lumped together without disaggregation—despite Ötüken’s observation about the “solid stratigraphy” at Demre.¹⁷⁴ The presence of the sgraffitos and the *champlevés* and the absence of any thirteenth-century ceramic wares, I believe, indicates the likelihood that the site was abandoned after the end of the twelfth century at the latest. The coin evidence too suggests that this site passed into Turkish hands after the

¹⁷⁰ Y. Ötüken, “Demre’deki Çalışmalarda Ele Geçen Küçük Buluntular,” in *1992 Yılı Anadolu Medeniyetleri Müzesi Konferansları Anadolu Medeniyetleri Müzesi* (Ankara, 1993), 102-117.

¹⁷¹ Ötüken, “Demre Aziz Nikolaos Kilisesi Kazısının Ortaçağ Araştırmalarına Katkıları,” *Sanat Tarihi Dergisi* 9 (1998), 85-102.

¹⁷² *Ibid.*, 101. Also see Ötüken, “Likya Ortaçağ Araştırmaları ve Demre Aziz Nikolas Kilisesi Kazısı,” *Adalya* 1 (1996), 73-85.

¹⁷³ Ötüken, “Likya Ortaçağ Araştırmaları,” 79.

¹⁷⁴ Ötüken, “Demre Aziz Nikolaos Kilisesi,” 87.

end of the twelfth century as the latest Byzantine coin (an unspecified issue of Isaac II) and the absence of Nicaean issues suggest.¹⁷⁵

Once we are in territory occupied by the Nicaeans in the thirteenth century, the thirteenth-century ceramic scene changes remarkably, as it did in areas that experienced Seljuk conquest. Excavations at the castle of Anaia near Kuşadası indicate that the site was occupied in Late Antiquity, based on the coin finds the latest of which was issued under Arkadios (395-408).¹⁷⁶ After a long interval, reoccupation of the site begins in the eleventh-century and there is an upward trajectory in terms of the archaeological remnants of activity on the site from the twelfth century on. Three coins (possibly all billon *trachea*) date from the Komnenian period but their numbers increase significantly in the thirteenth century.¹⁷⁷ Lale Doğer, who studied the ceramic finds from the castle, notes the presence of the “twelfth-century incised painted wares,” twelfth-century-*champlevés*, alongside the developed style sgraffito wares with bird motifs and floral designs: wares that bear the kufic-script imitative motifs on the margins, medallion-style incised sgraffito wares, the Green- and Brown-Painted Ware, and the Aegean

¹⁷⁵ V. Bulgurlu, "Demre-Myra Aziz Nikolaos Kilisesi Kazısında Bulunan Sikkeler Hakkında Notlar," in K. Dörtlük, B. Varkıvaç et al., eds., *The Third Symposium on Lycia. Symposium Proceedings* vol. 1 (Antalya, 2006), 121-128.

¹⁷⁶ Z. Mercangöz, "Kuşadası Kadı Kalesi 2001 Yılı Çalışmaları," *KST* 24. 2 (2002), 126-127.

¹⁷⁷ *Ibid.*, 130; Z. Mercangöz, "Emporion ve Kommerkion Olarak Anaia'nın Değişken Tarihsel Yazgısı," in A. Ödekan, E. Akyürek and N. Necipoğlu, eds., *Change in the Byzantine World in the Twelfth and Thirteenth Centuries* (Istanbul, 2010), 284-285.

wares (only two fragments) with the typical seabird motif. All of these ceramics, as we know from other sites, are dated to the twelfth century. Further, the approximate dates of these wares correspond to the finds from the castle wall (which excavators take to be a Komnenian structure) which contain coins that include three Komnenian issues covering a range from the reign of Alexios I to Andronikos I (1183-1185).¹⁷⁸ Doğer underscores the overwhelming presence of early thirteenth-century Zeuxippus wares (or Zeuxippus derivatives), of which the later types bear tripod marks. Zeuxippus wares have the highest concentrations (about 2,000 fragments) among the finds.¹⁷⁹ The total number of fine ware fragments is not given, yet the fact that only a couple of fragments each for twelfth-century fine wares such as the *champlevés* and the Aegean wares are mentioned, alongside the relatively sparse number of Komnenian coins (only three are found and published so far) compared to the thirteenth-century coins, all together highlight the significance of the thirteenth century in general and thirteenth-century fine wares in particular at this site. Even more interestingly, unglazed slipped base and lip finds alongside tripods indicate production at the site, even though no kilns have yet been discovered.¹⁸⁰ Because these tripods have been found in the same layers as the Zeuxippus wares and wasters, since the 2006 excavations the researchers

¹⁷⁸ *Ibid.*

¹⁷⁹ See L. Doğer, "Anaia-Kuşadası Kadıkalesi Kazısı 2002 Yılı Bizans Dönemi Seramik Buluntularının Ön Değerlendirmesi," *Sanat Tarihi Dergisi* 13.1 (2004), 3-4; Mercangöz, "Kuşadası Kadı Kalesi 2001 Yılı Çalışmaları," *KST* 24. 2 (2002), 129.

¹⁸⁰ Mercangöz, "Kuşadası Kadı Kalesi 2001 Yılı Çalışmaları," *KST* 24. 2 (2002), 129.

believe that Anaia was one of the production sites of this ware.¹⁸¹ A more exact dating of the castle would be helpful, in turn, for dating the pottery which includes Aegean (possibly imported, given their small amount) and Zeuxippus wares that are thought to postdate the former, as well as the other painted and sgraffito wares. Furthermore, these are found together with a “small number of 13th century Constantinopolitan White Wares (group 4).”¹⁸² We see parallels here to the Saraçhane results; in the thirteenth-century the White Wares are supplanted and eventually replaced by contemporary Byzantine sgraffitos. Specifically, the thirteenth-century products (such as the Zeuxippus wares) bearing tripod marks, alongside kiln furniture and wasters found at Anaia, point to their production there and indicate that large scale production of fine wares at the site began sometime in the thirteenth century.

Magnesia on the Meander, southeast of Ephesos, is thought to be a pottery production site, on the basis of the existence of tripod finds, and wasters. The local ware has a yellowish-red to brown clay body, sometimes mixed with lime and quartz that gives it a glimmer. The finds come in a variety of forms. Most of them have a grayish-yellow, brownish-yellow glaze.¹⁸³ Böhlendorf-Arslan thinks that the site goes back as far back as the eighth or ninth centuries, judging from the presence of Glazed White Ware

¹⁸¹ Mercangöz, F. İnan, “Kuşadası Kadıkalesi Kazısı 2006 Yılı Çalışmaları,” *KST* 29.3 (2007), 460-461.

¹⁸² Mercangöz, “Kuşadası Kadı Kalesi 2001 Yılı Çalışmaları,” *KST* 24. 2 (2002), 130.

¹⁸³ O. Bingöl, “Magnesia ad Meandrum,” *KST* 8 (1987), 59-65; Böhlendorf-Arslan, *Glasierte byzantinische Keramik aus der Türkei*, 247.

Group 1.¹⁸⁴ However, when the production of the red-bodied wares began is not clear. Zeuxippus style ornamentations (concentric circles, lines running along the edges, etc.) on wares from the site are noted to be “very simple,” and they usually do not cover the whole surface of the wares. There has been no systematic evaluation of the finds, which have nevertheless yielded coin evidence that could help fine-tune the dating of the ceramics.¹⁸⁵ Böhlendorf-Arslan further found similarities of the Zeuxippus types found there with those found at Thasos and Pergamon.¹⁸⁶ It seems then, that we have at hand another Zeuxippus-producing site at the thirteenth century in Nicaea which is only about 25 km east of the port town of Anaia.

Regarding Milet, the grounds for dating the earliest layers of the red-bodied wares and/or the transition from the Glazed White Wares to local production is poorly documented and hardly ever discussed.¹⁸⁷ Evidence from Ephesos is likewise very hard to sequence; we only have a list of the pottery: Glazed White Wares, Impressed White Wares with monochrome and polychrome glaze, painted wares, sgraffito and *champlevé*

¹⁸⁴ *Ibid.*, 250.

¹⁸⁵ Bingöl and G. Kökdemir, “Magnesia ad Meandrum 2002,” *KST* 25. 2 (2003), 372, for example, refers to coins and the “great number” of broken ceramics unearthed from the Artemision.

¹⁸⁶ Böhlendorf-Arslan, *Glasierte byzantinische Keramik aus der Türkei*, 248.

¹⁸⁷ W. Müller-Wiener, “Das Theaterkastell von Milet, *IstMitt* 17 (1967), 279-290; *idem.*, “Milet 1983-84,” *IstMitt* 35 (1985), 13-139 to give examples of rare instances where ceramics are mentioned. The articles in *IstMitt* end in 1991 with Müller-Wiener’s death.

wares.¹⁸⁸ Nevertheless, we know that all of the above wares are essentially from twelfth century. In Ephesos, Artemision, only six fragments of Zeuxippus wares have been found and two fragments that resemble the PSS; Waksman thinks that the former may have been imported from Sardis, based on their appearance and chemical analyses.¹⁸⁹ Vroom also mentions tripods found at the Artemision excavations, however, it is not yet known which ware they were used in the production of.¹⁹⁰ Regarding Milet and Ephesos the evidence is poor but it is clear that they were importing Constantinopolitan wares and possibly the twelfth-century sgraffitos, although if indeed they were imported, we do not know where they were made. A similar uncertainty looms over the thirteenth-century evidence. The Zeuxippus wares and the PSS wares in Ephesos may have been imports as chemical analysis suggests. The tripods, however, suggest that there was there was a yet-undated ceramic workshop that was active in the thirteenth century, as the tripod finds suggest.

Sardis is one of the sites in Western Asia Minor where the earliest “local” red-bodied sgraffito sherds are dated to the second half of the twelfth century, although this statement is not without its problems as I will shortly demonstrate. Excavations at

¹⁸⁸ Parman, “The Pottery from St John’s Basilica at Ephesos,” in V. Déroche and J.-M. Spieser, *Recherches sur la céramique byzantine*, 275-289.

¹⁸⁹ V. Vroom, “Medieval Pottery from the Artemision in Ephesus: Imports and Locally Produced Wares,” and Y. Waksman, “Chemical Analyses,” in F. Krinzinger, ed., *Spätantike und mittelalterliche Keramik aus Ephesos* (Verlag der Österreichischen Akademie der Wissenschaften, no. 332 Vienna, 2005), 17-49, 64.

¹⁹⁰ Vroom, “Medieval Pottery from the Artemision in Ephesus,” 28.

Sardis in the Byzantine shops have revealed that approximately seventy-five percent of the catalogued about 200 fragments are coarse red wares made from micaceous Sardian clay, which are considered mostly to be pieces from broken amphorae.¹⁹¹ Of the remaining potsherds, twenty percent were identified as local “coarse ware;” four percent as local red-bodied fine ware.¹⁹² Out of all these finds only one percent of the red-bodied wares is believed to have a different clay type from the rest which possibly distinguishes it from imported pottery, though the four percent local, buff fine ware seems to indicate that Sardis was not a major producer of fine wares.¹⁹³ The latest coins found at the shops date to the reign of Heraklios (the latest issues are from 612-616), with one exception found in shop E5 (E=East) where the numismatic evidence goes up to the reign of Constans II with the date of issue ranging between 654 and 664.¹⁹⁴ Most of the pottery found in the shops consists of ARS imitations, i.e. Phocaeian and Cypriot red slip wares for which the dating is affirmed by seventh-century coin finds. However, also present among the finds from the shops are the so-called “Middle Byzantine wares,” not corresponding to any coin finds, such as the white-slipped ware from shop E9, or the red-bodied white slipped ware “with concentric circles or spirals at the bottom” found in shop E17 where latest coins are from the reign of Heraklios, or the

¹⁹¹ J. S. Crawford, *Byzantine Shops at Sardis* (Cambridge Mass., 1990), 13.

¹⁹² *Ibid.*

¹⁹³ *Ibid.*, 14.

¹⁹⁴ *Ibid.*, 59

pottery from W13 where the latest *in situ* coins are from the early seventh century which seems to suggest that the later pottery may have been intrusive material.¹⁹⁵ On the other hand, the excavations outside the city walls did yield coins that roughly correspond to the above red-bodied wares, such as the Latin imitations of the issues of Alexios III.¹⁹⁶ These coins, together with the glazed pottery, attest to the re-occupation of the site by the Byzantines from ca. 1000 through the 1200s; as the excavators put it, “between the eleventh and the thirteenth centuries.”¹⁹⁷ One of the strongest arguments for the dating of the reoccupation of the site and the Middle Byzantine pottery is the cumulative number of the coins from Sardis: for the first time after the seventh century the total number of coins rise to twenty-eight during the period between 972-1028, and for the second time during the period between 1208 and 1254 which also corresponds to a total number of twenty-eight coins.¹⁹⁸ The fine pottery finds include Slip-Painted wares, sgraffito wares with spirals and cross patterns.¹⁹⁹ All of them are red-bodied with pale yellowish or green glaze (when colored glaze is used). There are no Constantinopolitan Glazed White Ware samples among the Sardinian finds, from which

¹⁹⁵ *Ibid.*, 72, 97 and 102 respectively.

¹⁹⁶ G. Hanfmann and J. Waldbaum, *A Survey of Sardis and the Major Monuments outside the City Walls* (Cambridge, Mass., 1975), 114.

¹⁹⁷ G. Hanfmann and S. Jacobs, *Archeological Exploration of Sardis* (Cambridge, Mass., 1975), 111.

¹⁹⁸ G. Bates, *Byzantine Coins* (Cambridge, Mass., 1971), 6-7. The total number of coins between 628 and 1282 is 223 as opposed to 1011 excavated coins dating to 491-616.

¹⁹⁹ Hanfmann and Jacobs. 102, 111, 113, 136, 142-143, 145, 148; figs. 226-227, 260, 376-377, 381, 404-405. Hanfmann and Waldbaum, *Survey of Sardis*, 105, 111, 113, 142 and 148.

Scott and Kamilli concluded that “no pottery can be dated earlier than the latter half of the twelfth century, with heavier concentrations belonging to the thirteenth.”²⁰⁰ Based on chemical analysis of sixteen sample potsherds and their comparison to the chemical data from the local soil, Scott and Kamilli further concluded that there was local production in Sardis then.²⁰¹ However, the small number of fragments does not support this claim, while in the absence of a kiln with coin evidence from the same context as the ceramics, the dating of the earliest red-bodied wares to the second half of the twelfth century is not certain. In fact, the presence of Slip-Painted wares, for example, suggests that twelfth-century types from the first half of that century were also present in Sardis. Whether specifically these twelfth-century fine wares were imported is yet unknown, but based on chemical analysis it seems that fine wares were produced in Sardis in the thirteenth century even though the excavators do not identify the type(s) of these thirteenth-century wares.

Excavations at the Smyrna agora yielded White Wares of the capital (some impressed, some inscribed and some painted) and at the site these wares constituted the greatest portion of the ceramic finds.²⁰² Though fewer with respect to them, also present

²⁰⁰ J. A. Scott and D. Kamilli, “Late Byzantine Pottery from Sardis,” in *Actes du XVe Congrès International d’ études byzantines* (Athens, 1981), 681.

²⁰¹ *Ibid.*, 685-686.

²⁰² Doğer, “Byzantine Ceramics: Excavations at Smyrna Agora (1997-1998 and 2002-2003),” in Çanak. *Late Antique and Medieval Pottery*, 103.

among the finds are the body and rim fragments of red-bodied, slipped “fine sgraffito” wares and Aegean wares. The excavators do not discuss the stratigraphy and make no reference to coins that could give us approximate dates for ceramics from the same context. The ceramics are dated based on *comparanda* from Morgan’s study on Corinth and “all the ports and peripheral settlements of the Comnenian Period.”²⁰³ It is worth noting that the city was taken –after a brief occupation starting in ca. 1088– from Tzachas by Alexios I in 1097 and it remained in Byzantine control until 1317.²⁰⁴ Further, Doğer writes that Zeuxippus types constitute the most numerous fragments “of the second half of the twelfth century and the late Byzantine period.”²⁰⁵ These finds are comparable in form and decoration technique to the wares from Ephesos, Anaia, Kyme, Pergamon and Nymphaion (modern Nif).²⁰⁶ So far, no evidence of production has come from excavations in and near Smyrna, including Nymphaion, where the Lascarid palace and the mint were located.²⁰⁷ All of the forty-six intact sgraffito bowls and plates at the Izmir Archaeological Museum, on the other hand, are deemed to be wares rescued from shipwrecks. All of the wares in sgraffito are identified as an early form of the Aegean

²⁰³ *Ibid.*, 98, 103, n. 40.

²⁰⁴ C. Foss, “Smyrna,” on-line ODB.

²⁰⁵ Doğer, “Byzantine Ceramics: Excavations at Smyrna Agora,” 103. According to Hayes, Zeuxippus cannot be dated to before ca. 1205-1210. See Hayes, *Excavations at Sarachane*, 47.

²⁰⁶ *Ibid.*, 104.

²⁰⁷ “The salvage excavations from Nif are not yet published.” Doğer, “Excavations at Smyrna Agora,” 104, n. 49.

wares; as such none of them has tripod marks on the surface.²⁰⁸ Whether these were imports or exports is also not known.

Overall, Smyrna yielded samples of the early twelfth-century sgraffito wares without tripod marks, likely imported to Smyrna –if the shipwreck samples were intended for this city. In addition, excavations in the city revealed fragments of the early thirteenth-century sgraffitos (Zeuxippus). However, the ceramic scene following the emergence of the Zeuxippus wares requires further study. Doğer mentions the presence of the “Brown Stained and Green Stained” wares from the thirteenth and fourteenth centuries, without commenting on their relationship with the essentially thirteenth-century wares such as the Zeuxippus.²⁰⁹ In sum, we do not know if Smyrna was a production site but the Smyrna agora excavation suggests that the Zeuxippus wares had the highest concentrations among the fine ceramic wares.²¹⁰ This observation regarding the Zeuxippus wares is noteworthy and quite common at other Nicaean sites that we have already studied such as Anaia, Milet and Magnesia on the Meander which probably produced these wares.

²⁰⁸ Doğer, *Izmir Arkeoloji Müzesi Örnekleriyle Kazıma Dekorlu Ege-Bizans Seramikleri* (Izmir, 2000), 70-74; *eadem*, “Izmir Arkeoloji Müzesindeki Bitkisel Bezemeli Sgraffito Bizans Kapları,” *OLBA* 4 (2001), 209-223.

²⁰⁹ Doğer, “Byzantine Ceramics: Excavations at Smyrna Agora,” 104.

²¹⁰ *Ibid.*, 103.

At Pergamon, medieval occupation does not begin before Leo VI (886-912). Significant concentrations of coins date from the end of the eleventh century, but no items of pottery come from the same context as the coins. Rebuilding inside the city began about a century later, during the second half of the twelfth century.²¹¹ Pergamon was a production site, as the wasters, the range of the forms, and the relative consistency of the applied designs and their technique suggest. There are only three imported Glazed White Wares among the 594 potsherds studied by Spieser.²¹² The importance of local production is further confirmed by the chemical analysis of the ceramics according to which ninety percent of the wares appear to have been made *in situ*.²¹³ The three potsherds of White Wares aside, the remaining are red-bodied wares decorated in sgraffito, *champlevés*, Slip-Painted wares and other glazed wares with similar designs and motifs that one encounters elsewhere. These wares constitute the totality of fine pottery found and possibly produced in Pergamon between the second half of the twelfth and the late thirteenth century.²¹⁴ Despite the level of minute detail given to understanding the technical and stylistic execution of the wares, Spieser does

²¹¹ Spieser, *Die Byzantinische Keramik aus der Stadtgrabung von Pergamon* (Berlin, 1996), 1.

²¹² *Ibid.*, 53.

²¹³ Spieser, Waksman, "Byzantine Ceramics Excavated in Pergamon: Archaeological Classification and Characterization of the Local and Imported Productions by PIXE and INAA Element Analysis, Mineralogy, Petrography," H. Maguire, ed., *Materials Analysis of Byzantine Pottery* (Washington D.C., 1998), 115-116.

²¹⁴ Spieser, *Pergamon*, 17-32 for a discussion of the different designs and design techniques encountered at Pergamon.

not discuss the sequence of the changes in the twelfth and thirteenth centuries in this important pottery production center. However, he makes this statement: "The ceramic finds in Pergamon come from a location that was developed in the late twelfth century but most of the concentration of activities is in the thirteenth century."²¹⁵ Thus Pergamon appears to have been an active production site possibly during the late twelfth but its ceramic output seems to have been highest during the thirteenth century.

The excavations at Gülpınar, near Assos, revealed no evidence of local production, such as kiln furniture or wasters. All the ceramic finds from there, unlike Ephesos and Magnesia on the Meander, are red-bodied wares and nearly all of these wares (95 percent) are covered in white slip over which yellow or green glaze was applied.²¹⁶ Yenişehirlioğlu observed that these wares were ornamented using the *champlevé*, sgraffito and slip-paint techniques; sgraffito and *champlevé* wares are "more common than the rest."²¹⁷ The same observation applies for Yenişehirlioğlu's work at the Temple of Apollo near modern Çanakkale: all the wares excavated at this site are red-bodied and glazed; 95 percent of them are covered in white slip. The designs are executed most commonly in sgraffito and *champlevé*; the motifs include the usual

²¹⁵ Spieser, "Informatique et céramique: L'exemple de Pergame," in V. Déroche and J.-M. Spieser, eds., *Recherches sur la céramique byzantine* (Paris, 1989), 291.

²¹⁶ F. Yenişehirlioğlu, "La céramique glaçurée de Gülpınar," in V. Déroche and J.-M. Spieser, eds., *Recherches sur la céramique byzantine*, 309.

²¹⁷ *Ibid.*, 309-311.

geometric and floral designs, as well as motifs depicting birds and fish.²¹⁸ Both Çanakkale and Gülpınar, therefore, appear to have imported (more likely) and/or produced mostly the twelfth-century Byzantine fine wares; the excavators by contrast, do not mention thirteenth-century types at all. The absence of the Zeuxippus wares is informative in this regard. According to the description of the wares it seems that there was not much of a continuity in the thirteenth century at these two relatively minor sites on the west coast of Asia Minor.

Better stratigraphy at Troas allowed Böhlendorf to conclude that the wares from the site date to the end of the twelfth and the “first half” of the thirteenth century, and they “show a local element,” because the glazed pottery found here constitutes a homogenous group of plates, bowls and jars.²¹⁹ Nevertheless, there are Glazed White Ware samples, very small in number, from the seventh to the tenth centuries, based solely on Hayes’ study, since at Troas they belong to “layers without stratigraphical context due to agricultural use.”²²⁰ There are no unglazed chafing wares, which might indicate that this was an agricultural production site exclusively and not a settlement.

²¹⁸ Yenişehirlioglu, “Apollo Smintheus Tapınağında Çıkan Ortaçağ Sırlı Seramikleri,” *I. Araştırma Sonuçları Toplantısı* (Ankara, 1983), 179-180.

²¹⁹ Böhlendorf, “Die Glazierte Byzantinische Keramik der Beşik Tepe (Troas),” *Studia Troica* 7 (1997), 363-444.

²²⁰ S. Japp, “Late Roman, Byzantine and Ottoman Pottery from Alexandria Troas,” in *Çanak. Late Antique and Medieval Pottery*, 64. Japp’s observations are based on the excavation conducted on the Roman street running along the agora adjacent to the Augustaeon.

The design techniques are similar to those observed at the other sites such as Pergamon, Corinth, Cyprus, Al Mina, Athens and Phokis: decorations are executed in sgraffito (but not in *champlevé*) with decorations that include s-band designs, concentric circles, half circles, spirals, section linings, palmettes, fish, bird, human motifs, etc.²²¹ Mannsperger mentions no Middle Byzantine coins but he does refer specifically to higher concentrations of post-1204 coins without specifying the amount or the issue-types.²²² Solely on the basis of the pottery finds, in particular the Zeuxippus derivatives found on site, Japp concludes that during the thirteenth century a minor settlement was established at Troas.²²³ There is no discussion of any changes that the sequence of pottery at the site might have undergone in the second half of the thirteenth century. In Troas too, economic activities, on the basis of both coin and pottery evidence, appear to have been concentrated in the thirteenth century. The intensification of economic activity during the thirteenth century confirms what we have argued in Part 1 based on the coin hoard and individual coin finds in Asia Minor. Even though there is no indication of their production on the site, the presence of the Zeuxippus wares seem significantly large enough for the excavators to conclude that Troas housed a small size settlement during the first half of the thirteenth century.

²²¹ *Ibid.*, 67-71; Böhlendorf, "Troas," 389-390.

²²² D. Mannsperger, "Vom Zahlungsmittel zum Leitartefakt- Münzen und Münzfunde in Ilion," in M. Korfmann, ed., *Troia. Archäologie eines Siedlungshügels und seiner Landschaft*, (Mainz am Rhein, 2006), 273. The latest coin he refers to is a denier tournois of John of Gravina (1322-1333).

²²³ Japp, "Late Roman, Byzantine and Ottoman Pottery," 71.

Unlike in Troas, where the argument for production is so far based solely on the number and typology of the ceramics, there is unmistakable archaeological evidence for production at nearby Atramyttion, where tripods and wasters were unearthed in “large quantities.”²²⁴ All of the wares are of red clay and they are decorated in sgraffito with the usual motifs. There also is numismatic evidence for settlement of the site in the Late Roman period. However, the dating and periodization of this settlement is unclear, nor is it evident from the discussion of the finds.²²⁵ The presence of tripods, on the other hand, implies that the production-related activity took place in the thirteenth century. Likewise, Ainos (modern Enez) excavations unearthed a kiln and numerous tripods. Fortunately, eighty-six silver coins “from the middle ages” were found outside the east corner of the Byzantine church, none of which are discussed or listed.²²⁶ Only the eleven gold *hyperpyra* are presented in a separate article: one was issued under Alexios I (1081-1118), nine under John II (1118-1143) and the remaining one under Isaac Angelos (1185-1195).²²⁷ Sgraffito wares are consequently thought to be eleventh and twelfth centuries; however, references to the tripods associated with the ceramics suggests that at least

²²⁴ E. Beksac, “Adramytteion/Ören 2001 Yılı Kazısı,” *KST* 24. 1 (2002), 90.

²²⁵ *Ibid.*, 85-94; *idem.*, Beksac, “Adramytteion/Ören 2002 Yılı Kazısı,” *KST* 25. 2 (2003), 327-338. There is a presentation of the ceramic finds in the 2005 report.

²²⁶ For references to the ceramic finds see, A. Erzen, “1981 Yılı Enez Kazısı,” *KST* 4 (1982), 285-290; *idem.*, “1985 Yılı Enez Kazısı,” *KST* 8.2 (1986), 273-290; *idem.*, “1986 Yılı Enez Kazısı,” *KST* 9. 2 (1987), 279-297; *idem.*, “1987 Yılı Enez Kazısı,” *KST* 10.2 (1988), 89-108; *idem.*, “1992 Yılı Enez Kazısı,” *KST* 15. 2 (1993), 455-473. Silver coins were found in 1985.

²²⁷ A. Erzen and I. Kaygusuz, “Trakya’da Enez (Antik Ainos) Kazılarında Bulunan Bizans Altın Sikkeleri (26 Resimle Birlikte),” *Belleten* 52. 203 (1988), 430. The gold coins were found in a small, clay vase.

some of these sgraffito wares are either late twelfth- or early thirteenth-century.²²⁸

Parman discusses thirteen fine ware fragments from Ainos (now part of the ceramics collection of the Edirne Archaeology Museum), from the site excavated in 1990. To what extent these thirteen fragments represent the remaining finds we are not told. Parman writes only that the Byzantine ceramics from the site extend “between the eleventh and twelfth/thirteenth centuries.”²²⁹ The thirteen samples she discusses are a mix in terms of clay type (some are “beige” and others are red-bodied) and not all bear tripod marks. All of the samples are well-fired, high-quality sgraffito wares with floral designs and bird, etc. motifs under a yellow or green glaze.²³⁰ Because there are tripods and wasters, the site is deemed a pottery production site. We do not know, however, whether it was active already during the twelfth century or only the thirteenth, as the tripods

²²⁸ Sixty-five tripods were recovered from Hatice Dural’s backyard alongside “ceramics from the Middle Ages.” A. Erzen, “1981 Yılı Enez Kazısı,” *KST* 4 (1982), 288. For references to Byzantine ceramics of the eleventh and twelfth centuries see S. Başaran, “Enez 1998 Yılı Kazı ve Onarım Çalışmaları,” *KST* 21. 2. (1999), 405-406; *idem.*, “Enez 2000 Yılı Kazı ve Onarım Çalışmaları,” *KST* 23. 2. (2001), 375-376; *idem.*, “Enez 2003 Yılı Kazı ve Onarım Çalışmaları,” *KST* 26. 2. (2004), 115-128, and finally, *idem.*, “Enez 1996 Yılı Kazı ve Onarım Çalışmaları,” *KST* 27. 2. (2005), 413. Interesting is the “clay pool” discovered in 2001: *idem.*, “Enez 2001 Yılı Kazı ve Onarım Çalışmaları,” *KST* 24. 2. (2002), 284.

²²⁹ Parman, “Edirne Arkeoloji Müzesinde Bulunan Enez 1990 Yılı Bizans Seramikleri,” *Anadolu Araştırmaları* 14 (1996), 393. For another discussion of the ceramics overall see Başaran, “Ortaçağ’da Enez (Ainos),” *Sanat Tarihi Dergisi* 9 (1998), 1-13, where he dates the finds to the eleventh and twelfth centuries. Both authors note the high quality of the ceramics there.

²³⁰ Parman, “Edirne Arkeoloji,” 393-394.

suggest.²³¹ Ainos was more likely a production site in the thirteenth century, more likely under the Nicaean state.

The finds from shipwrecks along the Turkish coast of the Aegean are very tentatively dated and as such cover a wide date range. The pottery and amphorae date the cargoes to the eleventh through the fourteenth centuries.²³² This applies also to the wrecks on the southern coast of the Marmara Sea.²³³ Off the coast of Marmara Island, there are several wrecks, the best known of which is the Çamaltı Burnu Wreck, dated to the thirteenth century on the basis of its anchor and amphora types, as well as the glazed sgraffito wares found on its sunken board.²³⁴ The ship was carrying about 800 amphorae; the total cargo is estimated to have weighed 50-60 tons. The size of the ship and the weight of its cargo can also be surmised from the thirty anchors found at the

²³¹ Başaran, "Enez 2002 Yılı Kazı ve Onarım Çalışmaları," *KST* 24. 2 (2002), 284.

²³² C. Pulak, "1984 Yılı Aydın Muğla ve Antalya Illeri Sualtı Araştırmaları," *AST* 3 (1985), 35-45 where the cargo is dated to the eleventh/twelfth centuries on the basis of the amphora types.

²³³ In 1986, off the Dalyan coast, 36 meters below the Bozburun shipwreck, Pulak identified two more wrecks and, on the basis of the amphora finds, tentatively dated them to the date range between the twelfth and the fifteenth centuries. See Pulak, "1986 Yılı Sualtı Araştırmaları," *AST* 5 (1987), 278. Pulak refers to another wreck in the Aegean (date range eleventh to the thirteenth century), west of Sıçan Adası, which is one of the islands of the Çatal Adaları Group in the southeast Aegean. See Pulak, "1996 Yılı Sualtı Araştırması," *AST* 15 (1997), 312-313. The wreck is dated on the basis of its anchors. Royal refers to another possibly twelfth-century wreck (Çömlek Burnu Wreck) found 15km south west of the Serçe Limanı Wreck. Royal refers to anchors and amphorae but not to pottery at the site of the wreck: Jeffrey Royal, "Beyond the Shallows: Shipwreck Discoveries from the 2005 Bozburun Peninsula Survey, Turkey," *INA Quarterly* 33.3 (2006), 3-11.

²³⁴ Günsenin, "1995 Yılı Marmara Adaları Sualtı Araştırması," *AST* 14 (1996), 97-105, *eadem*, "From Ganos to Serçe Limanı: Social and Economic Activities in the Propontis Illuminated by Recent Archeological and Historical Discoveries," *INA* 26.3 (1999), 18-22. At Çamaltı Burnu Wreck there were four bowls of red clay and one sample of a White Ware with a bird figure: Günsenin, "L'Épave de Çamaltı Burnu I (Ile de Marmara, Proconnèse) résultats des campagnes 2001-2002," *Anatolia Antiqua* 11 (2003), 369-370.

site of the wreck.²³⁵ The ceramic wares from the wreck contained a red clay bowl with fish motifs executed in sgraffito, a white/grayish plate with a bird figure and three Zeuxippus type bowls with carinated lips.²³⁶ The presence of Zeuxippus wares also suggest a date after ca. 1200.

Perhaps related to the Çamaltı Burnu Wreck, along the northern coast of the Marmara at Ganos/Gaziköy, Günsenin discovered a ceramic production site and found thirteenth-century glazed wares, dated by the *in situ* tripod finds.²³⁷ Together with Armstrong, she identified kiln wasters and sgraffito wares, which, they argue, belong to the monochrome Zeuxippus types IA and IB.²³⁸ Günsenin also refers to “kilns” at a nearby production site at Saraylar, a port town northeast of the Marmara Island. The glazed ceramics at this location are dated broadly “between the tenth and the fifteenth centuries.”²³⁹ If Günsenin and Armstrong’s identifications are correct, we will need to accept that Ganos was another Zeuxippus production site of the thirteenth century, active either under the Latin Empire or the Palaiologans after 1261. Since type I Zeuxippus is an early thirteenth century version it is more likely that they were made

²³⁵ Günsenin, “A Thirteenth-Century Wine Carrier: Çamaltı Burnu, Turkey” in ed. G. F. Bass, *Beneath the Seven Seas. Adventures with the Institute of Nautical Archaeology* (London, 2005), 118-123.

²³⁶ Günsenin, “L’Épave de Çamaltı Burnu I (Ile de Marmara, Proconnèse) résultats des campagnes 2001-2002,” *Anatolia Antiqua* 11 (2003), 369-70. Judging from their number these ceramics belonged to the crew.

²³⁷ Günsenin, “Ganos: résultats des campagnes de 1992-1993,” *Anatolia Antiqua* 3 (1995), 166.

²³⁸ Günsenin and Armstrong, “Glazed pottery Production at Ganos,” *Anatolia Antiqua* 3 (1995), 181.

²³⁹ Günsenin, “1994 Yılı Marmara Adaları Sualtı Araştırması,” *AST* 13 (1995), 360.

under Latin rule. Whether Ganos was an active fine-ceramic production site during the twelfth century is unclear.

Future research is likely to reveal further shipwrecks from the twelfth and thirteenth centuries in the Aegean and the Mediterranean, some of which might bear ceramic cargo similar to the wrecks described above.²⁴⁰ Nevertheless, the wrecks that so far have been brought to the surface reveal a lively trade in Byzantine ceramics variously dated to the twelfth and first half of the thirteenth centuries.²⁴¹ Regarding western Asia Minor, however, we have many times noted the increase in the economic activity during the thirteenth century rather than the twelfth century with respect to fine ceramic ware output.

We also have established approximate dates for the fine ware types we have seen at different sites above. Accordingly, when comparable numismatic evidence exists, it suggests that the sgraffito ceramics found their way to various Aegean markets first during the Komnenian period following on the heels of the economic developments of the eleventh century. Hierapolis and Yumuktepe excavations indicate a late eleventh-century date for the onset of the production of the Byzantine sgraffitos. Ceramic and

²⁴⁰ Cemal Pulak notes two large thirteenth-century wrecks in Greece (not specified where) which “will possibly not be excavated any time soon.” Personal communication from Prof. Pulak in 2007.

²⁴¹ Three shipwrecks with fine ware remains, considering that they represent about 5 percent of the total number of possible wrecks, is not an insignificant number. See M. McCormick, “Getting to Markets, Information, Shipwrecks and Exchange 300-1000,” presented at the BSANA Conference, November, 2009.

numismatic evidence in western Asia Minor suggest that particularly during the thirteenth century, there were a number of sgraffito production sites in this region which include Pergamon, Hierapolis, Anaia, Ainos, Nicaea and Atramyttion, if one only counts sites with structures identifiable as kilns and/or kiln furniture; but certainly not limited to these sites if one takes into consideration the typological uniformity of forms and/or chemical/petrological analyses of assemblages recovered from sites such as Sardis and Troas. It is important to note, further, that these Byzantine fine wares had to compete for a growing market starting from around 1100. For example, when the sgraffitos were first produced, the locally produced Glazed White Wares dominated the Constantinopolitan market. Syrian/Islamic wares constituted imported pottery alongside the fine sgraffito imports from the provinces, which were much less popular than the former in the twelfth century, as well as the painted sgraffitos and the Slip-Painted wares.²⁴² However, during the next century the Byzantine sgraffito gained an advantageous edge; it dominated the local markets and was exported as far as southern France.²⁴³

Given the data on coin finds, and given the evidence from Pergamon and Ainos, where it is demonstrable that ceramic production ramps up during the thirteenth

²⁴² Hayes, *Excavations at Sarachane*, 43-46.

²⁴³ H Amouric, F. Richez and L. Vallauri, eds., *Vingt Mille Pots sous les mers. Le Commerce de la céramique en Provence et Languedoc du Xe au XIXe siècle*, Musée d'Istres 27 Mai-28 Nov 1999 (Aix en Provence, 1999), 42, 47.

century, can we not postulate that *overall* most of that provincial fineware production occurred in the thirteenth century? A definitive answer cannot yet be given, but the overall evidence nudges in that direction. Also, based on the same general observation, it makes sense to now look even more carefully at the production sites of the Zeuxippus wares in Nicaean Asia Minor as it seems that an important segment of the production of this ware occurred within the borders of the Nicaean State. This is evident in Pergamon and Ainos, Anaia and Milet in particular, but also from the surging numbers of the Zeuxippus wares in these cities as well as at Smyrna and Magnesia on the Meander. Economic historians have so far been looking at Byzantine pottery production during the thirteenth century as a unified phenomenon, but perhaps it is now time to study the regional variations between western Asia Minor and Greece and the possible divisions within these two regions in terms of when and where production increases. As we will see, this chapter suggests that perhaps sites from Greece were responsible for the bulk of fine ceramic production in the twelfth century while western Asia Minor undertook a significant portion of that production in the thirteenth century, especially of the Zeuxippus wares, to a degree that it had not in the previous century. If in terms of fine ware production western Asia Minor was more active during the thirteenth century than the twelfth, where exactly were the *loci* of production of fine wares concentrated during the twelfth century? I will try to answer this question in the next chapter.

In terms of sgraffito exports to the eastern regions of the empire that fell out of its control after the 1070s, exactly when the Byzantine sgraffito ware lost this edge is not as clear as one would hope; however, evidence from eastern Asia Minor, Kinet in particular, suggests that in the face of competition with the Syrian PSS, the Byzantine sgraffito wares lost ground there sometime in the middle of the thirteenth century. Interestingly, Zeuxippus wares were the last vestiges of Byzantine exports to the east, as we can see from the evidence in important port towns such as Al Mina, Issos, Kinet and Yumuktepe. Inland sites, on the other hand, such as Gritille, Aşvan Kale, Korucutepe, Taşkun Kale and Tille Höyük, seem to have turned away from importing Byzantine wares all together from the late eleventh century on. In the cases of the inland sites, it seems that loss of political control over the eastern parts of the empire equaled loss of economic presence as well.

This chapter has argued that the Zeuxippus wares were overwhelmingly produced within the borders of the state of Nicaea. This phenomenon mirrors what we have learned from Part 1 that western Asia Minor displayed more wealth during the thirteenth century than the previous century. This observation also opens a new perspective: we now know that during the thirteenth century, the commercial communications between Nicaean sites and the Syrian port towns were active as far as one can argue for this based on the Zeuxippus ware evidence found in those Syrian port towns. If the Zeuxippus wares were indeed overwhelmingly produced in Nicaea then

this challenges the view on Nicaean commercial economy as one closed to trading with the outside world, in this case specifically with Syria and the Middle East. Zeuxippus wares were traded in Al Mina and Kinet and since we have not yet explored the excavation reports from other sites in Syria and Palestine it is possible that more evidence on Zeuxippus-type wares will emerge from other Crusader port towns.

One other interesting point that emerges from our study of the twelfth and thirteenth-century ceramic evidence in western Asia Minor is the general absence of Italian proto-maiolicas. The maiolicas, were, as we will see below, imported in not insignificant amounts to sites in Greece yet they had not left a detectable trace yet in Asia Minor. So far, none of the sites in Asia Minor produced evidence of Italian maiolica imports into the Nicaean State. Could this then be interpreted as further evidence for the economic protectionism of the Nicaean rulers, among them, most famously, John III?

CHAPTER 6

The Production and Distribution of Byzantine and Italian Fine Ceramics and Their Distribution in Greece and the Islands between the Late Eleventh and Mid-Thirteenth Centuries

This chapter begins with a discussion of the fine Byzantine wares found in two shipwrecks in the Aegean. A detailed discussion and analysis of the finds from sites in Greece will follow starting roughly from northeastern Greece. Like the previous one this chapter too will discuss all of the fine ware types from given sites. Where necessary, I will refer to the differences and similarities in this part of the empire with respect to the production and circulation of fine ceramic wares in western Asia Minor. This chapter also includes a comparative evaluation of the presence of Italian fine wares in the twelfth and thirteenth centuries, as these, among them especially the Italian maiolica, seem to have entered the Byzantine fine ware market in Greece but not in western Asia Minor. In Greece they competed with the Byzantine fine wares in the thirteenth century. Evidence from the Byzantine sites in mainland Greece show that in most of these sites, the Italian maiolicas turn up in significant numbers in upper layers that also contain the Byzantine sgraffitos, in particular the Zeuxippus wares. I will conclude this chapter with a discussion of the Corinthian excavations followed by a synthesis of the cumulative evidence, connecting it with the data of the previous chapter.

The shipwrecks of the Aegean and their cargoes bear witness to a lively Byzantine ceramic trade in the region during the twelfth century. The Alonissos-Pelagonnisos wreck in the Northern Sporades off the bay of Volos contain 1,490 identifiable ceramic fragments, in addition to innumerable potsherds and six millstones.²⁴⁴ The ceramic cargo of this ship included items such as 412 fragments identifiable as coming from large bowls, 213 plates, fifty-four amphorae and less than ten items of lamps, lids, glass vials and *pithoi*.²⁴⁵ All fine ware pieces are red-bodied, slipped and decorated with common motifs executed in the sgraffito technique over a white slipped surface under a yellow or green lead-based glaze, or slip-painted.²⁴⁶ The decorations consist of depictions of elaborate hunting scenes, geometric motifs such as spirals and interlaces as well as floral designs and animal figures.²⁴⁷ The motifs, the forms, and the decoration techniques of these wares display homogeneity, suggesting that they were produced at the same workshop, though its exact production site and final port or port(s) of destination are unknown. The wares of the Alonissos-Pelagonnisos wreck are, however, dated to 1100-1250 by Kritzas,²⁴⁸ and to the late

²⁴⁴ Ch. Kritzas, "Το βυζαντινόν ναυάγιον Πελοποννήσου Αλοννήσου," *AAA* 4. 2 (1971) 176-185.

²⁴⁵ *Ibid.*, 178. I find the proportion of bowls/plates quite significant as it suggests that the bowls are twice as common as the plates. The only study I am aware of that supports this observation is on the Boiotian finds: J. Vroom, "Byzantine Garlic and Turkish Delight," *Archaeological Dialogues* 7 (2000), 203-204.

²⁴⁶ Günsenin and Armstrong, "Glazed Pottery Production at Ganos," *Anatolia Antiqua* 3 (1995), 179-201; Günsenin, "Ganos: resultats des campagnes de 1992-1993," *Anatolia Antiqua* 3 (1995), 165-178.

²⁴⁷ For samples see Bakirtzis, *The Art of Sgraffito*, 122-142.

²⁴⁸ Kritzas, 180.

twelfth and early thirteenth centuries by Aikaterini Dellaporta and D. Bakirtzis.²⁴⁹ None of the samples discussed in Kritzas' article and in D. Bakirtzis' work bears tripod marks and none contains Zeuxippus-style decorations but all are executed in a fine sgraffito style. It is, therefore, reasonable to argue for a pre-1200 date. The combination of Slip-Painted wares and fine sgraffitos, however, informs us that they were contemporary because they are found in the same shipwreck and are typical twelfth-century ware types as evidence still to be discussed will confirm.

The Kastellorizo wreck was discovered off Rhodes in 1970. Like the Alonissos-Pelagonnisos wreck it contains fine sgraffitos, but unlike the former, the Kastellorizo wreck transported a wider range of decorated ceramic bowls. The decorations include sgraffito, Green- and Brown-Painted and Slip-Painted wares, all of which are, without exception, green glazed in a standard fashion. In Athens, similar wares were found together with issues of Alexios I and Manuel I.²⁵⁰ The wreck also contained fifty-one whole plates decorated in green and brown paint, glazed consistently with the same green glaze. The forms and decorations are again rather uniform: all the sgraffito wares are white-slipped and all—like the Green- and Brown-Painted wares—are green glazed. Sixty-nine bowls, including the bowls in various museums that are thought to be from

²⁴⁹ See Bakirtzis, *The Art of Sgraffito*, 121.

²⁵⁰ G. Theophilou and M. Michailidou, "Βυζαντινά πινάκια απο το Φόρτιο Ναυαγιασμένου Πλοίου κοντα στο Καστελλόριζο," *AD* 41 (1986), 324.

Kastellorizo, have the typical decorative pattern of the so-called Aegean Wares with simple stylized etchings of octopuses or seabird figures that are considered typical of this group.²⁵¹ According to Megaw's observations concerning the excavation in Paphos, this group stratigraphically pre-dates the Zeuxippus wares.²⁵² Therefore, even if they continued to be produced in the thirteenth century, their large-scale distribution is a matter essentially of the previous century. The Kastellorizo ship was carrying a cargo made up predominantly of ceramics when it sank off Rhodes in waters which "formed one of the most important shipping channels in the Eastern Mediterranean," that is, the maritime route between the Middle East, the Aegean and the West.²⁵³ Like that of Alonissos-Pelagonnisos Wreck, reckoning by the authors dates the Kastellorizo cargo to the late twelfth and early thirteenth centuries. Since none of the bowls or the plates have tripod marks or bear decorations from the later "developed style" sgraffito, it is more likely that they date from mid-to-late twelfth century rather than the early thirteenth.²⁵⁴ Pamela Armstrong proposes late twelfth century based on the twenty glazed bowls from the Ashmolean Museum which she assumes were originally from the Alonissos-

²⁵¹ Theophilou and Michailidou, 275-291. For images of further samples in color see *The Art of Sgraffito*, 143-157.

²⁵² Megaw, "An Early Thirteenth Century Aegean Glazed Ware," in G. Robertson and G. Henderson, eds., *Studies in Memory of David Talbot Rice* (Edinburgh, 1975), 40.

²⁵³ *The Art of Sgraffito*, 143.

²⁵⁴ Theophilou and Michailidou, "Plats byzantins provenant d'une épave près de Castellorizo," in V. Déroche and J.-M. Spieser, *Recherches sur la céramique byzantine*, 173-176. Their dating is based on the assumptions made by museum curators, as the Kastellorizo wreck seems to have supplied—at times via legally unclear means—a large number of museums.

Pelagonnisos wreck.²⁵⁵ Most of the wares are identified as Aegean Ware (17/20) or as its contemporaries (3/20). All have similar forms and have the two basic types of incised decoration, which consists of a central motif within a broad border. These are similar to the excavated finds in Cyprus, Phokis, Thessalonike, Thebes, Ephesos, Athens, Sparta and Corinth in addition to sites already referred to by Megaw such as Constantinople, Anemourion, Pergamon, Cherson, Jaffa and Caesarea.²⁵⁶ Michailidou adds Venice as a destination for wares imported indirectly from Rhodes, which, in her view, constituted a stop-over port for exports heading west from Cyprus.²⁵⁷ Overall, both shipwrecks indicate that an extensive trade existed by 1201 on the western coast of the Aegean.

According to Véronique François, Didymoteichon is the site where some of the wares found at Alexandria, Skopelos, Athens, Thasos, Crete, Saraçhane were originally produced. The samples that she assumes are from Didymoteichon all reveal a similar ceramic decoration technique that continues over the centuries (neither the techniques nor the centuries are specified). Regardless, it is certain that Didymoteichon was an

²⁵⁵ P. Armstrong, "A Group of Byzantine Bowls from Skopelos," *Oxford Journal of Archaeology* 10.3 (1991), 335-347.

²⁵⁶ Armstrong, 345-346.

²⁵⁷ Michailidou, "Ceramica veneziana dalla città medievale di Rodi (1309-1522)," in ed. S. Gelichi, *La Ceramica nel mondo bizantino tra XI e XV secolo e suoi rapporti con l'Italia. Atti del seminario (Siena), 11-13 marzo 1991* (Florence, 1993), 334. No kilns had been discovered in Rhodes up to the time the article was written.

active center of production of pottery under the Byzantines and continued to function as such under the Ottomans.²⁵⁸

Another, but perhaps much smaller, production site in Thrace is Sapes, northwest of Alexandroupolis, in the Rhodope Prefecture.²⁵⁹ Zekos dates the workshop to the thirteenth century in view of the coins found at the site which suggest that this workshop was certainly active in the latter part of that century. Small Latin imitation coins, a bronze *trachy* of John Vatatzes minted in Thessalonike and another billon *trachy* of Michael VIII confirm this dating.²⁶⁰ At this site, a “large number” of wheel-made stilts are found alongside wasters.²⁶¹ The two most common types of wares produced at this workshop were bowls and plates, decorated mostly in sgraffito, which constitutes the most common decorative style, followed by slip-painted as well as monochrome wares.²⁶² The fact that slip-painted wares existed at this site suggests that the workshop was active already in the twelfth century. The simplest type of sgraffito vessel is decorated with Zeuxippus-style concentric circles; as is usually observed for the thirteenth and fourteenth century wares, “there is a wide variety of decorative motifs,

²⁵⁸ François, “Une céramique peinte à l’engobe découverte en Méditerranée orientale,” *Anatolia Antiqua* 3 (1995), 203-217.

²⁵⁹ N. Zekos, “A Glazed Pottery Workshop in Thrace,” Ch. Bakirtzis, ed., *Congrès international sur la céramique médiévale en Méditerranée* (Athens, 2003), 455-466.

²⁶⁰ *Ibid.*, 465.

²⁶¹ *Ibid.*, 460.

²⁶² *Ibid.*, 461.

including lanceote leaves, radial motifs, scrolling tendrils and even running dogs.”²⁶³

This increased variety is a development that likely constitutes a response to the changed, competitive and creative market that became apparent around the middle of the thirteenth century. According to Zekos, apart from four potsherds with bird motifs, “all the glazed sgraffito wares from this workshop are characterized by vegetal and geometrical decoration.”²⁶⁴ Overall, even though Sapes was a Zeuxippus-producing site, it was active from at least the twelfth century into at least the last two decades of the thirteenth century. A thorough analysis of the ceramics of this site is forthcoming as the excavations have not yet been completed.

Serres comes across as a prominent site with its distinct fine wares which show a more advanced state of decoration than the earlier sgraffito wares. According to D. Bakirtzis, color was added to the monochrome Zeuxippus type ware later sometime during the thirteenth or perhaps the fourteenth century. In the samples from Serres she notes that “brushstrokes with yellow-brown color begin to appear, varying the incised decoration on Zeuxippus Ware.”²⁶⁵ She also observes that the Serres ware is more intensely decorated than the Thessalonike ware, in which the outlay of the decorations

²⁶³ *Ibid.*

²⁶⁴ *Ibid.*

²⁶⁵ Bakirtzis, E. Maguire and H. Maguire, eds., *Ceramic Art from Byzantine Serres* (Chicago, 1992), 24.

on the pottery is sparser.²⁶⁶ The most important distinction between Serres and Thessalonike wares is that in the former, stilts do not separate wares in the kiln, while the wares from Thessalonike, which Bakirtzis studied, bore tripod marks.²⁶⁷ This does suggest that the particular kiln site studied in Serres functioned earlier than the production site in Thessalonike. Apart from the sgraffito wares, excavations at Serres yielded polychrome wares, slip-painted wares and *champlevés*.²⁶⁸ The presence of polychrome and the slip-painted wares alongside the fine sgraffito wares is stronger evidence for the presence of a twelfth-century workshop in Serres. Further, the concentration of the late sgraffito wares also strongly suggests that Serres produced developed-style polychrome sgraffito wares in the following century, that is, it was a later-style-Zeuxippus Ware producer during the thirteenth and the fourteenth centuries.

Demetra and Charalambos Bakirtzis analyzed the ceramic material from the rotunda of St. George in Thessalonike. It amounts to more than 2,000 pieces.²⁶⁹ The two distinct groups of wares at this site that date before the thirteenth century are the small number of Constantinopolitan White Wares and the Green- and Brown-Painted wares,

²⁶⁶ Bakirtzis, "Serres Ware," in H. Maguire, ed., *Materials Analysis of Byzantine Pottery*, 140.

²⁶⁷ *Ibid.*

²⁶⁸ Bakirtzis, Maguire and Maguire, eds., *Ceramic Art from Byzantine Serres*, 27-28.

²⁶⁹ Ch. Bakirtzis and D. Papanikola-Bakirtzis, "De la céramique byzantine à glaçure à Thessalonique," *Byzantino Bulgarica* VII (1981), 421-436.

which are also found in significant numbers in Corinth. There are also a large number of sgraffito wares at this site depicting animal (especially birds, resembling the simple and stylized seabird figures from the Alonissos-Pelagonnisos wreck), geometric, floral and human motifs, as well as *champlevés*.²⁷⁰ The surest indications of local production at the site are the large number of tripods and wasters.²⁷¹ The excavators were also able to identify about three dozen samples of wares bearing the bird motif executed in the same style. This led Bakirtzises to conclude that the bowls and plates of this ceramic workshop in Thessalonike were exported to Constantinople, Serres, and Kavarna (north of Varna), judging from the fragments found in these sites.²⁷² Thus there is little doubt that Thessalonike was an active production site connected to a regional trade network in the twelfth and the thirteenth centuries. We do not know whether it was more active during the twelfth or the thirteenth century and thereafter; it seems, however, that this was not a Zeuxippus Ware producer even though it was active during the thirteenth century, as the tripods indicate.

In northern Greece, Thasos offers further ceramic evidence. The excavations here focus primarily on the area between Psatheris and Limenas, the main cities of the

²⁷⁰ Bakirtzis and D. Papanikola-Bakirtzis, "De la céramique byzantine à glaçure à Thessalonique," 423, 426.

²⁷¹ *Ibid.*, 434.

²⁷² *Ibid.*, 436.

island, and later at the site of the Genoese fortress.²⁷³ François studied the ceramic evidence separately, and she states that the main part of the ceramics came from the agora and the moat (of the fortress at the port) as well as from within the fortress which was repaired in the second half of the fourteenth century.²⁷⁴ No kilns or workshops were identified, and the ceramic material is dated primarily on the basis of its style and *comparanda* thirteen years after the excavation.²⁷⁵ François divides the fragments into “late sgraffito” wares (220/470) which constitute the largest group alongside thirty-six fragments identified as *champlevé*, 105 fragments of monochrome green-glazed wares (occasionally yellow) which bear no decoration over the slip, seven fragments of Slip-Painted wares, eight samples of “painted” wares and finally seven pieces of green- and brown- sgraffito wares.²⁷⁶ Notice that all of these are essentially twelfth-century wares. François assigns about fifty percent of the total ceramic finds (which include “foreign” wares) to the activity of the production site at Lesbos.²⁷⁷ The forms as well as the standard decoration (almost all green glazed) of the 105 fragments of monochrome green glazed wares show an interesting homogeneity, and considering the size of the

²⁷³ François, *La céramique byzantine à Thasos, Études Thassiennes* 16 (Athens, 1995), 4-5.

²⁷⁴ François, “La céramique byzantine à Thasos,” in S. Gelichi, ed., *La Ceramica nel mondo bizantino tra 11e 15 secolo e i suoi rapporti con l’Italia* (Florence, 1993), 317.

²⁷⁵ The excavation reports are published annually. For references to the Byzantine glazed wares in these reports see Spieser, “Travaux de L’ École Française en 1971,” *BCH* 96 (1972), 919 and *idem.*, “Travaux de L’ École Française en 1972,” *BCH* 97 (1973), 542, 546; François, *La céramique byzantine à Thasos*, 83.

²⁷⁶ François, *La céramique byzantine à Thasos*, 83.

²⁷⁷ François, “La céramique byzantine à Thasos,” in S. Gelichi, ed., *La Ceramica nel mondo bizantino*, 328.

excavated area, it might point to the presence of local production if that homogeneity did not result from imports from a single production site. However, the lack of any indication of a kiln or wasters rules against accepting local production without further proof. As for the foreign wares, François notes the presence of a single plate, clear glazed, decorated in cobalt blue, and depicting a fantastic animal, which she identifies as Raqqa or Rusafa Ware from the thirteenth and fourteenth centuries.²⁷⁸ She notes the presence of a very small number (four) of thirteenth-century Syrian PSS Wares, which she attributes to Genoese activity transporting the Syrian wares to the Aegean.²⁷⁹ She further notes the lack of Italian proto-maiolicas on the island.²⁸⁰ The profile of the finds, the absence of foreign imports, and in particular, the lack of proto-maiolicas, as well as the significant number of simple green-glazed wares, suggests that Thasos, at least the areas excavated which date to the late eleventh through the thirteenth century, depended predominantly on regional production. However, the presence of local workshops cannot be completely ruled out, given the fact that no excavation has been conducted at a different location on the island after 1978. One should add that the consistency of the types of wares traded in this area in northern Greece resembled those of western Asia Minor (including the capital) even after ca. 1250 when the increased

²⁷⁸ *Ibid.*, 319-321.

²⁷⁹ *Ibid.*, 324.

²⁸⁰ "Aucun vase de proto-majolique n'a été retrouvé au cours des fouilles thasiennes." François, *La Céramique Byzantine à Thasos*, 129.

presence of the Italian maiolicas set these two areas apart from southern Greece, Crete, Rhodes and Cyprus.²⁸¹

During the excavations at Olynthus, ceramic wares were found at the “megale tumba” at the site of a square tower around which the excavators found other structures belonging to the Byzantine period.²⁸² Xyngopoulos does not give the approximate numbers of the excavated sherds, but we do have a list of decorative style-based categories. He notes the presence of incised wares (glazed and unglazed versions), *champlevés*, incised and painted wares as well as painted wares with different color and design patterns.²⁸³ There are no fragments bearing an impressed decoration, which is a characteristic style of the Constantinopolitan White Wares that die out during the thirteenth century. Further, the excavators note that the most common group of wares from Olynthus consists of red-bodied incised wares that bear glaze. Most of these wares possess a yellowish-white slip under different shades of yellow glaze, varying from a very light to a very deep hue. Fragments with green glaze or green drops or splashes are fewer.²⁸⁴ Fragments belonging to painted wares, on the other

²⁸¹ François, “Céramiques importées à Byzance: une quasi-absence,” *Byzantinoslavica* 58. 2 (1997), 387-404. François first noted the absence of proto-maiolica and the RMR wares from western Asia Minor. *Ibid.*, 395, 399.

²⁸² A. Xyngopoulos, “Byzantine Pottery from Olynthus,” in D. M. Robinson, *Excavations at Olynthus. Part 5 Mosaics, Vases, and Lamps of Olynthus Found in 1928 and 1931* (Baltimore, 1933), 285-292.

²⁸³ *Ibid.*, 286.

²⁸⁴ *Ibid.*, 287.

hand, are painted in beautiful light green as well as yellow, on a colored background that makes them look like relief work.²⁸⁵ Overall, the decorative motifs consisted of human, animal and floral designs as well as geometric designs, and in one case, an inscription in Greek which the authors attribute to an illiterate potter.²⁸⁶ Based on the similarities between the wares found at this site and in Thessalonike, Xyngopoulos deduced that the Olynthian sherds belonged to the group of wares produced at Thessalonike.²⁸⁷ Considering the proximity of the site to Thessalonike,²⁸⁸ this seems probable, although it does not exclude imports from other production sites in the region.

The area south of Thessalonike, especially Thessaly, is poor in terms of surveys and excavations; we do not have any study of the ceramic evidence of this area and western Macedonia. We do have evidence, however, from Arta, in southern Epiros. The finds from within modern Arta have been brought to light by rescue excavations. Because the excavation layers have been badly disturbed, the ceramic deposits from the city proper are rarely stratified.²⁸⁹ A relatively small proportion of these wares have

²⁸⁵ *Ibid.*, 288.

²⁸⁶ *Ibid.*, 289. For the inscription see, plate 206, figure 18.

²⁸⁷ *Ibid.*, 292.

²⁸⁸ The distance between Olynthus and Thessalonike is ca. 50 km by land and ca. 85 km by sea.

²⁸⁹ B. Papadopoulou and K. Tsouris, "Late Byzantine Ceramics from Arta: Some Examples," in S. Gelichi, ed., *La Ceramica nel mondo bizantino tra XI e XV secolo e suoi rapporti con l'Italia. Atti del seminario* (Florence, 1993), 241.

been dated to the eleventh and twelfth centuries. The majority, however, is dated to the period between the thirteenth and the fifteenth centuries.²⁹⁰ Ceramic evidence comes from the outskirts of Arta, from two excavations that brought to light secular and ecclesiastical buildings “built at the beginning and abandoned in the latter half of the thirteenth century.”²⁹¹ From these excavations on the outskirts of the modern town, ninety-two coins were unearthed, of which six are tentatively dated to the eleventh and twelfth centuries, the rest are thirteenth century issues.²⁹² The glazed pottery from these two excavations and from the *bacini*, which were inlaid in walls to decorate, include monochrome wares, green painted wares, sgraffitos, slip-painted wares, Roulette Wares and proto-maiolicas.²⁹³ Their distribution is quite different with respect to what we have seen above and what we will see below in other sites in Greece, and the difference lies in the overall proportion of the Italian maiolicas which show a strong link between Italy and Arta in terms of fine ceramic trade.²⁹⁴ In Arta, the proto-maiolicas not only constitute a significant portion of the finds, but they also show a greater variety as they include a combination of archaic maiolica (green- and brown-painted) and the proto-

²⁹⁰ *Ibid.*, 241-242.

²⁹¹ *Ibid.* 242.

²⁹² *Ibid.*

²⁹³ Roulette wares are of north Italian origin, possibly from the Veneto region and/or Emilia Romagna. The name of the wares come from the parallel lines on its surface incised with a rotating instrument (a roulette). See Vroom, *Byzantine to Modern Pottery in the Aegean*, 132.

²⁹⁴ Italian maiolicas, their types, origins and periodization are discussed in detail below p. 307.

maiolicas which use four colors (brown/black, blue, yellow and green).²⁹⁵ Some of these wares have gridiron motifs, some the typical maiolica petals painted in blue, while others have chevron or fish motifs, again painted in the typical maiolica blue.²⁹⁶ The overwhelming majority of the maiolicas from Arta were unearthed in a rescue operation at an unspecified location that produced a total of 693 glazed fragments as part of group of finds dated collectively to the thirteenth century. Of these potsherds, the excavators considered ninety-five percent to be of Italian provenance,²⁹⁷ two percent Byzantine and three percent of undetermined origin.²⁹⁸ Collectively, the evidence from the excavations and from the *bacini* in churches have revealed a few specimens of monochrome wares,²⁹⁹ an unspecified number of fragments of green-painted wares, only a few fragments of sgraffito wares glazed green or yellow, “some sherds” of Slip-Painted wares, a single Zeuxippus fragment built into the wall of the church of St. Theodora dated to the 1270s,³⁰⁰ and a single fragment of Roulette Ware.³⁰¹ The authors do not specify where exactly the two stratified excavations took place and whether the percentages above are from one of these rescue excavations in the outskirts of the city,

²⁹⁵ *Ibid.*, 248.

²⁹⁶ *Ibid.*, 250-252.

²⁹⁷ By Italian provenance they most likely are referring to the Italian maiolicas.

²⁹⁸ *Ibid.*, 259.

²⁹⁹ *Ibid.*, 242-243.

³⁰⁰ *Ibid.*, 245.

³⁰¹ *Ibid.*, 248.

although this seems to be the case. Further, they do not give us a detailed account of the stratification of the respective coin and other evidence so as to more accurately specify the dates for different groups of ceramics; rather, they make a more general list of different ceramic types and assign general dates to each ceramic grouping. Regardless, considering the small number of the Zeuxippus wares and in particular the paucity of the developed style sgraffitos, along with the disproportionately high number of maiolicas, the excavated levels most likely date after the 1230s. As I will argue below, maiolicas were first produced in Italy and the large-scale exportation of these wares began around the middle of the thirteenth century. In short, a detailed disaggregation of the coin and ceramic evidence is required to clarify the significance of the sequence of the pottery finds at Arta. Regardless of the sequence, Arta is an extraordinary site that has yielded concentrations of ceramic evidence unlike those seen in other sites in Greece. This situation is doubtless related to Arta's location about 140 km off the coast of Italy. As such the city seems to have belonged to a different marketing and distribution system, which in turn sets Arta, the capital of the Despotate of Epiros, apart from sites in northern Greece. The similarity between the ceramic finds and their proportions in Arta and Butrint supports this observation.



Fig. 2. 7. Proto-maiolica Plate. C. H. Morgan, *The Byzantine Pottery. Corinth vol. 11* (Cambridge, Mass., 1942), Pl. 34.

The evidence from Butrint, north of Arta across from Corfu, yielded once again a significant proportion of maiolicas. Excavations at the Triconch palace and the baptistery clearly show that the earliest Byzantine wares are from the twelfth and the early thirteenth century and are represented by fine sgraffitos and by Green- and Brown-Painted wares.³⁰² The picture changes in the thirteenth century, when large quantities of

proto-maiolicas were imported from the West, mainly from Apulia in South Italy.³⁰³

Vroom wrote that it is “tempting” to relate the influx of the ceramics to the annexation of Butrint and Corfu by Manfred of Sicily in 1257 and later by his successor Charles of Anjou in 1279.³⁰⁴ A small assembly of coins comes from the 1994-1999 season; the “significant quantities” recovered from deposits during the 2000-2001 excavations are going to be published.³⁰⁵ The small assembly includes a *denier tournois* of William de la Roche (1280-1308); one *follis* and one *miliaresion* of Michael VII; one *trachy* of Andronikos

³⁰² J. Vroom, “The Medieval and Post-Medieval Finewares and Cooking Wares from the Triconch Palace and the Baptistery,” in eds. R. Hodges, W. Bowden and K. Lako, *Byzantine Butrint: Excavations and Surveys 1994-1999* (Oxford, 2004), 291.

³⁰³ *Ibid.*

³⁰⁴ *Ibid.*

³⁰⁵ *Ibid.*, 300.

II or III.³⁰⁶ No coins come from the context in which the Green- and Brown-Painted wares were found; the billon *trachy* is from the same context as the fine spiral-designed Byzantine sgraffito from the Baptistery. None of the remaining coins in the 1994-1999 batches postdate the middle of the thirteenth century. For further information we will have to wait for the publication of the finds from the later deposits.

The Triconch Palace yielded a total of 494 sherds of which twenty-three percent are identified as proto-maiolica and fourteen percent as archaic maiolica, while the fine white (slipped) wares constitute a respective twenty-three percent.³⁰⁷ The last group consists of polychrome sgraffito wares, green and yellow glazed wares that are not necessarily of Byzantine provenance. Significantly, the most common shapes of these latter wares are carinated bowls with carved ridges on the upper exteriors, a detail commonly seen in the so-called Roulette Wares.³⁰⁸ The “earliest wares” (Byzantine wares) from the Triconch Palace are what Vroom terms “miscellaneous” fine red wares, which make up only five percent (about twenty-five sherds) of the total number of finds among which Vroom states there is only one fragment of a twelfth-century Green- and Brown-Painted ware; the rest are sgraffitos.³⁰⁹ The Triconch Palace context 1185, dated

³⁰⁶ See the list on *ibid.*, 301-304.

³⁰⁷ *Ibid.*, 279. The percentages are based on “the total counted numbers of sherds found during the 1995-98 season.” *Ibid.*, 278.

³⁰⁸ *Ibid.*, 279.

³⁰⁹ *Ibid.*, 281.

to the middle of the thirteenth to early fifteenth century, yielded seventy five fragments of proto-maiolicas. These mark the mid-thirteenth-century start date for the intense infiltration of the ware, while the single fragment of Spanish Lusterware from the late fourteenth-early fifteenth century marks their end.³¹⁰ In the same context fifty-eight fragments of polychrome, lead-glazed, painted Italian wares were unearthed while the so-called 'Metallic Wares', samples of which are also found in Corinth (which we will discuss below), are represented by twenty one fragments.³¹¹ What is significant about this context dated to the middle of the thirteenth century is the absence of Byzantine sgraffito wares or Byzantine wares in general. This suggests that by the 1250s, Butrint turned completely to Italian workshops for its fine pottery supply. The finds from the Baptistery (636 fragments in total) tell a similar story. "A few small fragments" of Byzantine sgraffitos were found in contexts 2279 (a *trachy* of Andronikos II or III is also from this context) and 2280 while six more Byzantine sgraffitos came from contexts 2011 (a *foliis* of Michael VII), 2279 and 2280, but to these Vroom refers to as "local sgraffitos from Corinth and/or Isthmia" because of their different clay type with respect to the above "Byzantine" sgraffitos.³¹² Archaic maiolicas and proto-maiolicas together constitute twenty-eight percent of the fine ware deposits in the Baptistery, while

³¹⁰ *Ibid.*, 281 and 286.

³¹¹ *Ibid.*, 283.

³¹² *Ibid.*, 290.

Vroom's category of the fine white (slipped) wares includes exclusively wares, such as the Venetian sgraffitos, that are assigned an Italian provenance.³¹³

It is evident that the thirteenth-century contexts have revealed a much reduced number of Byzantine wares and an increased number of Italian ceramics. This appears to present a more or less accurate picture of especially the latter part of that century.

Overall, the overwhelming concentrations of Italian wares after ca. 1250 in Butrint and Arta set these two sites apart from the other sites in northern Greece and western Asia Minor.

Eastern Phokis is an inland region in southeast Greece, east of Mt. Parnassos, northwest of Thebes. P. Armstrong made a survey of the area of the villages near Lake Kopais.³¹⁴ At the village of Panagia, Armstrong identified Slip-Painted wares, Green- and Brown-Painted wares, painted sgraffito, fine sgraffito, spatter-painted wares (i.e. twelfth-century wares) as well as the Aegean and Zeuxippus wares.³¹⁵ In one of the villages (Sphaka), in addition to the above, Armstrong noted a single fragment of a "local" maiolica and a fragment of Turkish Kütahya ware.³¹⁶ In the village of Valtesi, the earliest pottery dates from the beginning of the twelfth century and the repertoire

³¹³ *Ibid.*, 287-288.

³¹⁴ P. Armstrong, "Some Byzantine and Later Settlements in Eastern Phokis," *BSA* 84 (1989), 1-47.

³¹⁵ *Ibid.*, 13.

³¹⁶ *Ibid.*, 15-16. It is not clear why this is local maiolica.

includes slip-painted wares, Green- and Brown-Painted wares, broadly incised sgraffito, fine sgraffito and Aegean Wares.³¹⁷ In Michaeilidina, the survey yielded, likewise, twelfth- and thirteenth-century material which consists of exactly the same group of wares listed above.³¹⁸ The same types of wares are recorded in Bogdanos, in addition to four sherds of “local” maiolicas alongside coarse wares which are not even approximately dated.³¹⁹ Armstrong notes the presence of the same twelfth- and thirteenth-century wares from villages of Smixi and Kryvosi, underscoring a similar distribution of Slip-Painted, Green- and Brown-Painted wares, sgraffito and Zeuxippus as well as the Aegean wares.³²⁰ The frescoes of the main church of the nearby village of Agios Georgios dated to 1200-1210, provide the only outside evidence for the relative dating of the pottery finds. The village was not occupied after the end of the Byzantine period. The Byzantine period is represented by a single fragment of a fine sgraffito plate.³²¹ Overall the survey presents a nearly complete list of wares extending from the twelfth century into the period where maiolicas became visible, around the middle of the thirteenth century. Out of about 700 fine ware fragments an overwhelming portion (94 percent) of the finds date from the twelfth century, while the thirteenth-century

³¹⁷ *Ibid.*, 17-22.

³¹⁸ *Ibid.*, 22-24.

³¹⁹ *Ibid.*, 24-29.

³²⁰ *Ibid.*, 30-34 and 36.

³²¹ *Ibid.*, 35.

wares represent about six percent of the fine wares at Phokis. The presence of the maiolicas—even though not in significant amounts--sometime in the first half of the thirteenth century is an occurrence noted also at Butrint and Arta. Similarly in Eastern Phokis, the importation of Italian wares became visible, if not prominent, by ca. 1250.³²²

The Boiotia survey covered an area of 5.2 km² as part of a project that started in 1979 and ended in 1991. The survey takes into consideration the density and the approximate dates of the finds from the primary settlements as well as secondary zones which they refer to as “off-sites.”³²³ The team identified about twenty-five medieval sites, some extending into the late Byzantine/Frankish period, each of which varies in size. Because the size of each site varies, sometimes drastically, rather than making a raw count of the finds, the surveyors have opted to conform to “a notional 500-sherd overall sample” from each site.³²⁴ Joanita Vroom studied a total of 12,000 post-Roman

³²² However, this survey does not provide enough evidence to conclude that the maiolicas were in fact made locally; sufficient evidence would require material gathered directly from an excavation or chemical analysis. Even if the maiolicas were made locally the fact that their imitations were made at local workshops is significant.

³²³ J. Bintliff, P. Howard and A. Snodgrass, *Testing the Hinterland. The Work of the Boeotia Survey (1989-1991) in the Southern Approaches to the City of Thespiiai* (Oxford, 2007), 15. Sites are areas where the survey team noted concentrated forms of human activity different than the extensive human processes, such as artificial manuring, that are responsible for the creation of off-sites. The survey team made a raw count of the finds at a given area and then counts the potsherds collected as the site-assemblage sample, and subsequently assign definitely or possibly to one or more periods with the purpose of understanding a history of the occupation of the site. These are then standardized mathematically.

³²⁴ “We have moved on from making ‘raw’ counts of collected sherds to a second stage, where these numbers are adjusted upwards or downwards s as to conform to a *notional 500-sherd overall sample* from each site.” The surveyors aim to allow for direct comparison of dated sherd numbers among sites, and between material from the site and off-site. Since the sample size varies a lot, they convert each total mathematically to a standard figure. *Ibid.*, 19.

sherds from the Boiotia survey in a separate work in which she discusses the wares of all the thirty sites covered by the survey.³²⁵ She notes that the periods most abundantly represented are the twelfth and the early thirteenth centuries, followed by the sixteenth century. The periods represented by the least number of sherds turned out to be the Early Byzantine (7th-9th centuries) and the Frankish/Late Byzantine (13th-15th centuries) periods.³²⁶ Percentages of glazed wares in a total of glazed and unglazed pottery, including coarse wares, vary between one percent and five percent (at Hyettos and Askra, respectively) to fifteen percent (in site CN 3 and Neochori).³²⁷ These two important sites in Boiotia—CN 3 and Neochori—show an increase in the number of glazed wares from about the tenth century onward. The total number of glazed wares on both sites slowly rose between the tenth and the twelfth/thirteenth centuries to fifteen percent, which coincides with Hayes' observations for the elite context of Sarachane for the tenth and eleventh centuries.³²⁸ Thus, Vroom underscores that between mid-thirteenth and the fifteenth century the total number of glazed wares in VM4 and Rhadon rose to twenty-four percent and thirty-two percent respectively,

³²⁵ J. Vroom, *After Antiquity. Ceramics and Society in the Aegean from the 7th to the 20th century A.C. A Case Study from Boeotia, Central Greece* (Leiden, 2003).

³²⁶ *Ibid.*, 134, 136.

³²⁷ *Ibid.*, 230.

³²⁸ *Ibid.*, 231.

which reflects a comparable rise that has a wider significance.³²⁹ In Istanbul Hayes noted that the percentage of glazed pottery rose to 35-40 percent within early Turkish contexts.³³⁰ Among the glazed wares only one fragment of plain glazed White Ware turned up in Thespieae, which falls within the western-most boundary of the survey area closest to Thebes.³³¹

Slip-Painted wares (a twelfth-century ware) come from a total number of fourteen sites.³³² Green- and Brown-Painted wares (likewise from the twelfth century) are found in fifteen sites. Thirteen of the surveyed sites produced both the Slip-Painted and the Green- and Brown-Painted wares, and according to the horizontal chronology chart, these two wares share at least half a century of common period of use.³³³ “Many fragments” of the Green- and Brown-Painted wares recovered from the survey revealed red-bodied wares covered in a thick white slip that bear an almost transparent light grey lead-based glaze.³³⁴ Together with the Slip-Painted and the sgraffito wares these constitute the backbone of the glazed wares that date to the twelfth century on the one hand and thirteenth on the other: the sgraffito wares continue into the thirteenth

³²⁹ *Ibid.*, 233.

³³⁰ *Ibid.*, 235.

³³¹ *Ibid.*, 150.

³³² *Ibid.*, 151.

³³³ *Ibid.*, 187. Kastellorizo wreck, it will be remembered, carried cargoes of both of these wares, which again, attests to the fact that the slip-painted and the green and brown painted wares were contemporary.

³³⁴ *Ibid.*, 151-152.

century whereas the Green- and Brown-Painted ware and the Slip-Painted Ware belong essentially to the period before 1200.³³⁵ Every single site studied in this chapter and the previous one has confirmed this fact consistently. It is thus possible to roughly date a site, a region or an archaeological layer if the proportions of these twelfth-century fine wares are significant.

Fine sgraffito samples come from seventeen sites; the Boiotia samples have orange/red fabric with a thickly applied transparent glaze over the interior and the upper part of the vessel.³³⁶ Compared to the fine sgraffito fragments, painted sgraffito wares (in green and brown, they date later than the fine sgraffitos) were a rare find: only a few sherds of the ware were found in site CN3.³³⁷ Fragments of the Zeuxippus Ware of orange fabric, white slip and yellowish glaze is cited among wares of the Late Byzantine/Frankish period of the thirteenth and fourteenth centuries, and was recovered from ten sites.³³⁸ Monochrome sgraffitos which are thought to be imports

³³⁵ At Saraçhane, green and brown (black and green painted) painted wares and Slip-Painted wares come from the deposits “closely related” to the mid-twelfth-century painted sgraffito wares. See, Hayes, *Excavations at Sarachane*, 46. Vroom’s “horizontal chronology” of the Boiotian wares supports this observation. The period of use for the Slip-Painted ware overlaps with that of the Green- and Brown-Painted Ware, while the *possible* period of use for both types extends from roughly ca. 1100 to ca. 1220. Vroom’s chronology suggests that the Green-and Brown-Painted wares appear to be in use slightly later than the Slip-Painted wares and they possibly remained in use for about a couple of decades longer than the Slip-Painted wares. See Vroom, *After Antiquity*, 187.

³³⁶ Vroom, *After Antiquity*, 152.

³³⁷ *Ibid.*, 153.

³³⁸ *Ibid.*, 164.

from Thessalonike and/or Corinth come from twelve and eight sites respectively. Broad incised sgraffitos and the *champlevés*, on the other hand, have turned up from a total of twenty one sites.³³⁹ All of these minor sites are clustered in the middle of the Boiotia plain, about 15 km away from the Corinthian gulf and 25 km from the Euboeian Gulf in the north. The closest city is Thebes, which is only about 15 km away. Further, six sites yielded Italian maiolica fragments, the majority of which bear a ladder medallion design painted in blue under a tin glaze which “looks rather poor.”³⁴⁰ Misfired waster fragments were frequently encountered in the survey area. Despite this evidence, Vroom cautions against arguing conclusively for local production before stronger evidence, such as a kiln or a waster pit, is found; however, she notes that the survey has on the whole confirmed Hayes’ earlier observation that Boiotia is “rich in finds, but lacking in imports.”³⁴¹ The pottery finds, therefore, reveal that the Slip-Painted, Green- and Brown-Painted wares and the fine sgraffitos were supplanted in the thirteenth century by the Zeuxippus wares as well as the painted, broadly incised sgraffitos.³⁴² Italian maiolicas and the monochrome as well as the polychrome sgraffito wares from Italy seem to be the only imported foreign wares of the thirteenth century that are of some significance, unless, of course, if Zeuxippus wares were also imported, which is

³³⁹ *Ibid.*, 165-166.

³⁴⁰ *Ibid.*, 172-173.

³⁴¹ *Ibid.*, 191-192.

³⁴² See the horizontal chronology in *ibid.*, 187. The period of use for Zeuxippus wares is ca. 1200-1300.

possible but not certain.³⁴³ The thirteenth century, significantly, witnesses not only a significant rise in imports but it also marks a decline in the total number of fragments: “sherds of the Late Byzantine/Frankish period are few in numbers.” Most of the diagnostic wares were imports from areas such as Corinth and Thessalonike, and later, “increasingly” from Italy.³⁴⁴

Based on the above discussion, it seems possible to argue that the greatest portion of Boiotia’s fine-ceramics were produced locally or regionally during the twelfth century. The imports, specifically the Italian maiolicas and possibly also the Zeuxippus wares constitute the fine ceramic imports to the area in the thirteenth century. It is quite significant that during the thirteenth century, when the size of the imported fine wares was growing significantly, the overall size of fine wares was declining with respect to the previous century. For Boiotia then, the thirteenth century seems to have been a period of relative decline in the overall size of local production with respect to the twelfth century.

Early excavations in the city of Thebes have revealed sgraffito wares: glazed bowl and plate samples were found in the pits opened on properties of current

³⁴³ See the tables on *ibid.*, 192-194 and the percentage charts on *ibid.*, 196.

³⁴⁴ *Ibid.*, 193.

residents of Thebes.³⁴⁵ Another study more recently conducted on the Kadmeia in Thebes mentions a large enough number of wasters to signal the presence of a kiln nearby whose activity period is uncertain. This evidence suggests the production of pottery at Thebes.³⁴⁶ There is a total of 330 fragments from this excavation (148 of them fine wares, about forty-four percent of the total), and these comprise glazed bowls, amphorae as well as other coarse ware, including cooking pots. No coins were found among the finds, but the pottery is organized by deposits. The distribution of Byzantine and Italian fine wares in the deposits is rather interesting and constitutes a stark contrast to the evidence from Arta and Butrint. In general, the amount of Italian proto-maiolicas—which, according to Armstrong, date from the first half of the thirteenth century—per deposit is very low, with some deposits bearing none. Deposit 2, for example, yielded only one fragment of proto-maiolica; the rest of its ceramics are overwhelmingly Byzantine pottery which Armstrong dates to 1050 to 1150.³⁴⁷ In contrast, the Zeuxippus wares (seventeen in total) have a higher rate than the maiolicas (five in total). Armstrong argues that the Zeuxippus samples are from the mid-thirteenth-century, based on similar type wares (*comparandas*) from Corinth.³⁴⁸ Deposit 3

³⁴⁵ Anon., “Ανάσκαφαι Παρακολουθήσεις Έσκαφών- Έρευναι (Θήβαι κυρίως πόλις),” *AD* 23 (1968), 212.

³⁴⁶ Armstrong, “Byzantine Thebes: Excavations on the Kadmeia, 1980,” *BSA* 88 (1993), 335.

³⁴⁷ *Ibid.*, 306.

³⁴⁸ *Ibid.*

yielded Zeuxippus and Aegean wares, and other sgraffitos. Although there are fifteenth-century finds among the pottery from this deposit, it yielded no Italian maiolica examples, which is true also for Deposit 4.³⁴⁹ Zeuxippus samples, painted sgraffito wares, monochrome green glazed samples are among the finds from Deposit 5 which extends to the eighteenth century, but no maiolicas are recorded from it.³⁵⁰ Likewise, only two wares thought to be Italian are found in Deposit 6.³⁵¹ Zeuxippus and Aegean wares as well as monochrome glazed wares and only a single ware thought to come from north Italy are found in Deposit 8.³⁵²

Overall, out of the 330 fragments found at the excavation in Kadmeia in Thebes only five are identified as Italian, while the majority of the wares are Byzantine products, local or imported. Thus Thebes, together with Athens, as we will see below, stands out among other sites in southern Greece where the importation of Italian maiolicas did not at all reach significant numbers. Another observation based on the overall numbers of finds from the Kadmeia is the higher presence of thirteenth-century wares (about thirty fragments in total) with respect to the wares from the twelfth century (about twenty fragments in total). The overwhelming presence of the

³⁴⁹ *Ibid.*, 310.

³⁵⁰ *Ibid.*, 322.

³⁵¹ *Ibid.*

³⁵² *Ibid.*, 328, 330.

Zeuxippus wares in the thirteenth century is also worthy of note. Since the latter were imported into Thebes, probably but not conclusively from western Asia Minor, they were the primary ceramic imports into this site during the thirteenth century while the Italian maiolicas do not dominate the imported ceramic scene as they do in other sites from southern Greece, except Athens where we turn to next. These facts about the Italian maiolica and Zeuxippus imports are interesting because they potentially show trade relations Thebes had established between Italy and western Asia Minor during the thirteenth century.

Excavations in the Agora of Athens, have yielded no samples identified as Italian imports.³⁵³ Franz divides the archaeological contexts within which pottery were found into five groups. The pottery from these five contexts are studied in five different groups, each (except for Group B) dated by coins from the tenth to the thirteenth centuries, and are identified as local wares or perhaps regional imports.³⁵⁴ Group A wares come from a cistern used as a refuse pit which, alongside pottery, yielded coins of Nikephoros I which date to the earliest, that is, the ninth century layers of the pit, suggesting that the refuse material started filling in then.³⁵⁵ The bulk of the pottery comes from the same layers as the two coins of Alexios I, while “several fragments” of

³⁵³ A. Franz, “Middle Byzantine Pottery in Athens,” *Hesperia* 7. 3 (1938), 429-467.

³⁵⁴ *Ibid.*, 429.

³⁵⁵ *Ibid.*, 432.

pottery, which on the whole resemble those from the layers dated to the reign of Alexios I, came from the layer above the former that contained coins of Manuel I. This proves continuity of these “painted” wares into the middle of the twelfth century.³⁵⁶ Franz finds the overall quality of the ceramics in these two layers poor, “but a few pieces raise the artistic level considerably.”³⁵⁷ Group A pottery (which includes about eighty fine ware fragments) from these two layers are black (brown) and green painted and sgraffito bowls and plates. The only imported ware is “an Islamic imitation of porcelain.”³⁵⁸ The next layer is dated also to the reign of Manuel but the most important difference is the “much greater consistency” of the pottery and the complete disappearance of painted wares which are supplanted by sgraffitos: “the total absence of painted wares [in this layer] implies that they had been largely supplanted by sgraffito [wares].”³⁵⁹ The following layer was a deposit of earth, 65 cm thick, containing no ceramic fragments. For this period there is no evidence to warrant an approximate dating, but the thick deposit of sifted earth seems indicative of a considerable lapse of time, in fact, “comparisons of the pottery above this sterile deposit with dated pieces from other parts of the agora suggest that this last period belongs to the mid-thirteenth

³⁵⁶ *Ibid.*

³⁵⁷ *Ibid.*

³⁵⁸ *Ibid.*

³⁵⁹ *Ibid.*

century.”³⁶⁰ Almost exact replicas of a rabbit figure in sgraffito are found frequently in middle and late thirteenth-century contexts elsewhere, and “often with coins of William II Villehardouin (1245-1278).”³⁶¹

Pottery in Group B from the cistern came with no associated coins. The contexts are, however, consistent and illustrate that they are contemporaneous with the pottery found regularly in deposits underneath those containing black (brown) and green painted ware, which in turn were found in the same layers with coins of Alexios I and Manuel I. The polychrome cup (dated to the tenth-eleventh century) and the brown glazed wares are all from this context.³⁶² Further, several Constantinopolitan White Ware sherds were found, all in a very fragmentary state; otherwise, stamped red clay and coarse wares were also among the contents of the cistern.³⁶³ Thus, Group B pottery from the cistern contain no sgraffito sherds and may be dated to the tenth and early eleventh centuries on the basis of *comparanda*.

Franz refers to Group C pottery found in a pit in the east end of the South Stoa, as the “most satisfactory group” in terms of chronology.³⁶⁴ The pit contains, together

³⁶⁰ *Ibid.*, 433.

³⁶¹ *Ibid.*

³⁶² *Ibid.*

³⁶³ *Ibid.*, 434.

³⁶⁴ *Ibid.*

with coarse wares, a few glazed sherds of black and green painted wares and simple sgraffito wares. Conclusive evidence is provided by fifteen coins, all belonging to the period between 1057 and 1118. All of the coins, except two, date from the last quarter of the eleventh century and extend to the end of the reign of Alexios I, based on which Franz concludes that these wares were probably produced around 1100.³⁶⁵ Group D pottery, on the other hand, was found in a well used in connection with the Byzantine house built over the north part of the Odeion.³⁶⁶ Only one coin of John II comes from this same context as the decorated wares which include black (brown) and green painted sherds, and sgraffitos.³⁶⁷ The evidence from Athens confirms, yet again an early to middle-twelfth-century date for the Green- and Brown-Painted wares and the early type of sgraffitos (also called fine sgraffitos).

Group E pottery comes from the *pithos* immediately to the west of the Stoa of Attalos. The lower fill had no coins but it did contain a few sherds of rather fine sgraffito and some black (brown) and green painted ware. A coin of Alexios I and four coins of Manuel I date the upper fill to the second half of the twelfth century.³⁶⁸ Franz also notes the rarity of polychrome wares in Athens with respect to Corinth, but adds

³⁶⁵ *Ibid.*, 434-435.

³⁶⁶ *Ibid.*, 435

³⁶⁷ *Ibid.*

³⁶⁸ *Ibid.*

that in all levels that precede the brown and green painted wares or the sgraffito wares, “there is either brown glaze, or [Constantinopolitan] White Ware or both.”³⁶⁹ At exactly what point in time the sgraffitos emerge at this site is hard to say, even though it would not be wrong to associate their emergence with the reigns of Alexios I’s immediate successors. Nevertheless, monochrome brown glazed wares seem to have continued in use long after the introduction of the new wares, although in diminished quantities.³⁷⁰ From the great predominance of the Green- and Brown-Painted wares over the sgraffitos in the two early periods of Group A, we probably are correct in assuming that the painted wares were introduced some time during the eleventh century, and became popular at the end of the same century.³⁷¹

One should note that Franz’s analysis is in accordance with Vroom’s observation for the Green- and Brown-Painted wares and the Slip-Painted wares in Boiotia above, which in turn is in agreement with the evidence from Saraçhane as well as the Kastellorizo Wreck. When sgraffito was introduced in the twelfth century, it gradually replaced the painted (and Slip-Painted) wares, and so by the end of the twelfth century it is not uncommon to find deposits with no black and green wares in the Athenian

³⁶⁹ *Ibid.*, 436.

³⁷⁰ *Ibid.*

³⁷¹ *Ibid.*

Agora.³⁷² The emergence of different styles, it seems, comes in consecutive waves that follow each other in a subsequent fashion and slowly fade out. If one does not keep track of the proportions of these ceramics it becomes especially difficult to finely date the evidence during these transition periods, such as the end of the eleventh and the early twelfth centuries when the Green- and Brown-Painted wares were followed by the increasingly popular sgraffito wares. It is important to keep this qualification in mind when we discuss another transition period during the middle of the thirteenth century, when the Byzantine sgraffitos had to compete with increasingly popular foreign wares; the same difficulty concerning chronological fine tuning applies to this phenomenon as well. Overall, however, the Athenian Agora presents a similar picture as Thebes because no Italian wares were found there. The important difference between the two sites is that the Athenian excavation does not include the thirteenth-century layers. This might explain the absence of the Italian wares unlike the Kadmeia excavation of Thebes where maiolicas were present but few in number.

Franz also notes the difficulty of definitively ruling out Athens as a production site. Criteria for distinguishing the imported wares from the local imitations have been established in only a few cases, although, the general similarity of the pottery from Athens, Corinth and Sparta indicate a common source for much of it.³⁷³ Overall, very

³⁷² A. Franz, "Middle Byzantine Pottery in Athens," *Hesperia* 7. 3 (1938), 436.

³⁷³ *Ibid.*, 437-438.

few samples of polychrome wares, White Wares and monochrome glazed wares come from the earliest layers of the Athens agora excavations. The layers dated from the late eleventh to the early twelfth centuries contain Green- and Brown-Painted wares, Slip-Painted wares and sgraffito wares. Of these, the impressive majority is constituted by the sgraffitos (about ninety-five fragments in the catalogue). The second largest category is constituted by the Green- and Brown-Painted wares (about twenty fragments).³⁷⁴ Among the twelfth-century layers, Slip-Painted wares are rare—as are the wares painted in red over the white slip—for in this excavation they are represented by only four fragments.³⁷⁵ Italian imports and the Zeuxippus wares are totally absent from the layers studied in this excavation because the thirteenth-century levels are not excavated. Athens, therefore, gives us an accurate picture of the whole spectrum of twelfth-century Byzantine wares when local demand was met exclusively by locally produced fine wares.

The excavation at the Lower Castle on the island of Andros off Athens has revealed that the castle was constructed at the beginning of the thirteenth century when Andros became a domain of Venice.³⁷⁶ Since the stratification of layers is disturbed, the

³⁷⁴ See catalogue *ibid.*, 438-467.

³⁷⁵ *Ibid.* The catalogue contains about 78 bowls and 28 plates. Thus, the catalogued items also support Vroom's observation regarding the typology of the Boiotian finds; in the Athenian agora too the bowls are much more common than the plates.

³⁷⁶ N. Kontogiannis and S. Arvaniti, "The Medieval Kato Kastro of Andros. Excavation, Data and Ceramic Material," in Çanak, *Late Antique and Medieval Pottery*, 349-362; E. Dore, P. Velissariou, M. Michaelides,

evidence is dated by comparison with similar finds from other sites; nevertheless, it is important to note that all the coin finds date from the thirteenth and the fourteenth centuries, in other words, from the period of Venetian rule.³⁷⁷ Zeuxippus Ware with concentric circles and spirals on white slip under green or yellow glaze constitutes a large category.³⁷⁸ Sgraffito wares with decorated spirals, geometric motifs, tree patterns, and Solomon's knots constitute the second most common category, while only three sherds of Slip-Painted wares are found.³⁷⁹ In terms of imports from Italy, both the archaic maiolica and the proto-maiolica sherds are present among the pottery finds. However, collectively they do not constitute a group larger than the ninety-six fragments of Byzantine wares, as fourteen fragments of Italian maiolicas together with six fragments of "Hispanic" wares were found at the castle. The remaining fifteen fine pottery fragments are Ottoman wares.³⁸⁰ A small list of Byzantine ceramics from various excavations on the island of Delos, south of Andros, do not add to what we already know; the list includes a sgraffito sherd with a bird motif—which, judging by the

eds., *Κάτο Καστρο. Η Πρότη Φάση των Ανασκαφών τσο Νενετικό Φρούριο της Χώρας Ανδρου* (Andros, 2003).

³⁷⁷ Kontogiannis and Arvaniti, "The Medieval Kato Kastro of Andros," 353-354.

³⁷⁸ *Ibid.*, 355.

³⁷⁹ *Ibid.*, 356.

³⁸⁰ Dore, Velissariou, Michaelides, *Κάτο Καστρο*, 106-109.

illustration belongs to the Aegean Ware group—three sherds of Green- and Brown-Painted Ware and two sherds of green glazed wares.³⁸¹

Most of the pottery from the excavation in Isthmia, 12 km east of Corinth, close to the Hexamilion which was rebuilt by Manuel II in 1415, comes from the fortress built at the site of the ancient sanctuary of Poseidon.³⁸² The local wares from this site have a coarse fabric covered with cream-colored slip under a green or yellow glaze. Gregory notes that “the Isthmian pieces conform well to Sanders’ description of the [Zeuxippus] ware”³⁸³ Most of the pieces, he adds, have concentric circles in the center and have several ring-shaped marks inside; that is, they bear tripod marks which is the best type of evidence to prove that they were stacked on top of each other inside the kiln. All of the thirteenth-century sherds Gregory discusses are sgraffitos from the tower, the South Gate and the interior of the fortress.³⁸⁴ These sgraffitos are found together with the sherds identified as south Italian white-slipped bowls, decorated in black, red and/or blue paint, likewise recovered from the tower and from the South Gate, and from the same context as the above.³⁸⁵ Also from the tower but from a different lot come the RMR

³⁸¹ P. Bruneau, “Contribution à l’histoire urbaine de Délos à l’époque Hellénistique et à l’époque impériale,” *BCH* 92.2 (1968), 709.

³⁸² T. Gregory, “Local and Imported Ware from Isthmia,” S. Gelichi, ed., *La ceramica nel mondo bizantino tra XI e XV secolo*, 283-306.

³⁸³ *Ibid.*, 286.

³⁸⁴ *Ibid.*, 288.

³⁸⁵ *Ibid.*, 293.

wares decorated in black, blue and green paint under a lead-based yellowish glaze.³⁸⁶ Of the four archaic maiolica fragments,³⁸⁷ one is from the same context as the sgraffito sample found in the fortress interior, while two are from the same context as the sgraffitos from the tower.³⁸⁸ It is important to note, on the other hand, that no sgraffito sherd has been identified in the western part of the fortifications where, as we shall see, most of the fourteenth- and fifteenth-century “Western” (Italian and Spanish) wares were found.³⁸⁹ Among these, Gregory refers to the Italian wares from northeast Italy which resemble Byzantine sgraffitos of the previous centuries, since they use similar designs and a similar glazing technique.³⁹⁰ The Italian painted wares of the northeast, on the other hand, constitute the only pottery type found in substantial numbers outside the fortress. This led Gregory to date these, together with the white-slipped Spanish wares from Valencia, which are painted in gold and purplish color, to the early fifteenth century, the period when Manuel II rebuilt the Hexamilion.³⁹¹ Overall, the co-existence of the Byzantine and Italian fragments in the same lots of the tower and the

³⁸⁶ *Ibid.*, 295-296. David Whitehouse termed the RMR (Ramina, Manganese, Rosso) ware in view of its green, brown and red color.

³⁸⁷ Gregory identifies them as “proto” maiolica but the sherds are all painted only in green and brown, like the archaic maiolicas.

³⁸⁸ *Ibid.*, 298-299.

³⁸⁹ *Ibid.*, 288.

³⁹⁰ *Ibid.*, 299-302.

³⁹¹ *Ibid.*, 304-305.

fortress interior is significant. We have already seen that this co-existence could indicate a date as early as the middle of the thirteenth century. Gregory does not discuss the overall proportions of the wares identified as Byzantine or Italian, and we are not informed how the proportion of the Italian and Byzantine wares changes in time. He does, however, make an important observation by underscoring that the south Italian wares are “exceedingly common” in Isthmia.³⁹² However, the question concerning the proportion of the total number of Byzantine wares to the total number of contemporary Italian wares is left unanswered, even though it potentially could give us a better idea about the scale of the Italian imports in this place and in this time.

Further south of the survey area in the Peloponnese across from the Corinthian Gulf, Wells and Runnels conducted the Berbati-Limnes survey, which more specifically comprises the area north of Nafplion, east of Mycenae and south of Corinth.³⁹³ The third period covered by the survey extends from 1100 to 1400 and to it belong the majority of the pottery finds from a total number of “find spots” which surpass 500.³⁹⁴ Since the survey proceeds by a list of find spots and a corresponding list of wares found at each spot, there is very little information on the proportions of different groups of pottery,

³⁹² *Ibid.*, 292. He writes “much more common” are the fragments from the thirteenth to the fifteenth centuries; he gives the same date range for the proto-maiolicas. See Gregory, “Late Byzantine Pottery from Isthmia: New Evidence from the Korinthia,” in V. Déroche and J.-M. Spieser, 201-208.

³⁹³ B. Wells and C. Runnels, eds., *The Berbati-Limnes Archaeological Survey 1988-1990* (Stockholm, 1996).

³⁹⁴ *Ibid.*, 433-434.

even though the lists are extensive. Plain glazed bowls, green painted bowls, Zeuxippus fragments,³⁹⁵ Green- and Brown-Painted bowl, fine sgraffito, painted broadly incised sgraffito fragments constitute a complete sampling of the Byzantine pottery from the survey dated to the twelfth and thirteenth centuries. Only one archaic maiolica fragment was recovered from the Limnes area from Findspot 310.³⁹⁶ Likewise, only one Slip-Painted bowl is recorded from the Findspot 400.³⁹⁷ Overall, the majority of the pottery from the Berbati-Limnes survey consists of sgraffito ceramics, including sgraffitos decorated with more advanced techniques such as the broadly incised, painted sgraffito wares. Plain glazed wares and green/brown painted wares constitute the second and the third largest groups respectively. Overall, it seems that at this site

³⁹⁵ "Pink slip inside and over the rim. Inside three incised concentric circles. Olive yellow to pale greenish yellow muddy glaze" constitutes the definition of a typical type I Zeuxippus ware. *Ibid.*, 352.

³⁹⁶ *Ibid.*, 403. Findspots 5, 26 and 519 give a good idea about the other find spots in which a similar concentration of wares is found. Here is a complete list of glazed wares from the twelfth and thirteenth centuries from three findspots. **Findspot 5:** Plain glazed bowl with hard reddish fabric with grayish slip inside; a green painted bowl, with red fabric grayish slip. See, *ibid.*, 350. **Findspot 26:** Incised sgraffito ware of light red fabric with white slip bearing a chevron motif and thin curved lines under an olive yellow glaze; plain glazed bowl with incised bands of hard reddish yellow fabric with small and large and tiny dark red brown inclusions. See *ibid.*, 352. **Findspot 519:** Plain glazed bowl; fragment of ring base and fine dark brown fabric with some small white inclusions bearing traces of white slip on both side and covered in green glaze. See *ibid.*, 355. Tract 554 of Findspot 519: A green and brown painted bowl of reddish yellow fabric with light reddish brown slip on the outside and grayish white slip on the inside. Decorated with alternating stripes of green and yellowish brown radiating from center and added spots of dark green; sgraffito bowl (Zeuxippus) of hard and reddish brown fabric with black inclusions. Decorated with concentric circles incised lines and panels with crosshatching under an olive-brown glaze; sgraffito bowl (Zeuxippus) fragment of rounded wall with slightly everted rim and of hard and fine reddish brown fabric with small white and dark inclusions. It is decorated with concentric circles on wall and glazed green; plain glazed bowl with incised bands of hard and fine pink fabric covered with white slip inside and outside down to the base. See *ibid.*, 356.

³⁹⁷ *Ibid.*, 381.

the twelfth century is marked by the highest concentration of fine ceramics, as one can tell from the higher collective numbers of twelfth-century wares such as the Green- and Brown-Painted wares, incised sgraffitos and slip-painted wares. The presence of imports during the thirteenth century is indicated by Zeuxippus wares and Italian maiolica but there seems to have been a reduction in the overall numbers of fine wares during that period, although it is far from being certain.

The group of maiolicas found in the church of Panaghia Merbaka, a few kilometers from Argos in the Peloponnese, north of Nafplion, are thought to be of the same type of clay as the Brindisi maiolicas found at Corinth. The *bacini* of the church themselves are one of the first examples used by scholars to draw attention to and discuss the presence of Italian wares in Greece.³⁹⁸ Various excavations were conducted in different sites within Argos during the 1980s. During the 1985 excavation on the property of Kostakis, six coins of Manuel I and two other coins of William II Villehardouin were found together with thirteenth-century pottery. Among them, Oikonomou-Laniado singles out the archaic maiolicas with geometric and vegetal motifs painted in blue and brown without distinguishing which coins are associated with what groups of wares.³⁹⁹ The 1989 excavation conducted at the site of the

³⁹⁸ A. Oikonomou-Laniado, "La ceramique protomajolique d'Argos," ed. S. Gelichi, *La ceramica nel mondo Bizantino tra 11 e 15 secolo*, 308; Megaw, "Glazed bowls in Churches," *Δέλτιον της Χριστιανικής Αρχαιολογικής Εταιρείας* 4 (1964), 145-162.

³⁹⁹ A. Oikonomou-Laniado, 308.

Telecommunications Services uncovered pottery from the sixth to the twelfth and thirteenth centuries, including glazed fine wares such as the sgraffitos, green glazed wares, *champlevés*, Slip-Painted wares which were found alongside Roulette Wares and the proto-maiolicas.⁴⁰⁰ The maiolicas are more or less intact and have blue lines followed by two circles of brown at the borders. One of the whole samples has flowers with yellow petals in the middle.⁴⁰¹ During the excavations conducted in the same year at the site of the Bank of Agriculture, excavators found the exact same assembly of wares while the maiolicas included a sample with gridiron motif painted in blue, brown and yellow which, apart from Gastouni, Clarentza, and Corinth were found also in Durazzo (modern, Dürres) as well as in Hama, Al Mina, Athlit and Caesarea.⁴⁰² Likewise, a group of three plates that bear the so-called “tarente motif” (resembles the Greek letter beta; the first samples were from Tarente—Taranto—in southern Italy) have counterparts in Brindisi, Mistra, Athlit and Lakonia.⁴⁰³ All of the discussed Italian wares are thought to be thirteenth- and fourteenth-century imports, even though the variations in aggregate ratios over these centuries are not given. The connection between southern Italy is apparent—a phenomenon we had seen with the coin evidence in the first chapter.

⁴⁰⁰ *Ibid.*, 308-309. On Roulette Ware see Part 2, n. 293 above.

⁴⁰¹ *Ibid.*, 309.

⁴⁰² *Ibid.*, 309-310.

⁴⁰³ *Ibid.*, 313-314.

Another study on the rescue excavations conducted in Argos mentions that the Byzantine levels produced a “considerable” number of glazed ceramics dating from the twelfth to the fourteenth centuries and the discovery of a kiln site, tripod stilts and wasters indicate that, Argos was indeed a prolific production site.⁴⁰⁴ The earliest wares found in small numbers at Argos and Sparta are the Constantinopolitan White Wares of the tenth/eleventh centuries, while the twelfth and thirteenth century wares from Argos cover the same list given above for Merbaka, but additionally include the Measles Ware, while the imported wares include fourteenth-century Serres ware in addition to the above list consisting of Italian maiolicas and the Roulette Wares.⁴⁰⁵ This list, however, does not help us better understand the details of the transition during the thirteenth century, especially insofar as its potential to illuminate the transition from the primacy of Byzantine ceramic trade to that of the Italian trade and production. For this, we shall turn to the detailed discussion of the finds from Corinth. We will see that the analysis of Corinthian wares gives a much finer dating during this period.

The earliest excavations in Sparta were conducted at the turn of the last century.⁴⁰⁶ Dawkins and Droop noted pottery fragments from the Acropolis but sherds

⁴⁰⁴ A. Bakourou, E. Katsara, P. Kalamara, “Argos and Sparta: Pottery of the 12th and 13th Centuries,” in Ch. Bakirtzis, ed., *Congrès international sur la céramique médiévale en Méditerranée* (Athens, 2003), 233-236.

⁴⁰⁵ *Ibid.*, 234.

⁴⁰⁶ R. M., Dawkins and J. P., Droop, “Byzantine Pottery from Sparta,” *BSA* 17 (1910-11), 23-28.

were especially abundant in the east end of the Late Roman fortifications.⁴⁰⁷ Some of these wares are, not surprisingly, the impressed and glazed Constantinopolitan White Wares, dated to the ninth and tenth centuries.⁴⁰⁸ According to Dimopoulos, in the eleventh century these White Wares constituted up to eighty percent of the glazed wares in Sparta.⁴⁰⁹ Dawkins and Droop identified a large group of sgraffito wares glazed both in green and yellow, alongside white slipped wares on which the designs are painted “in brown and emerald green.”⁴¹⁰ In a separate work, Armstrong studied twenty-nine samples of Zeuxippus Ware which were excavated by the 1910 team, now housed in the museum of the British School at Athens.⁴¹¹ In all twenty-nine pieces, the slip is thick and white and slightly extends over the rim; the glaze covers almost the same area and neither the slip nor the glaze—usually green and yellow, sometimes with added brown speckles—cover the exterior. Full shapes are usually bowls with carinated rims that have glossy yellow-brown glaze, usually with one or two lines below

⁴⁰⁷ *Ibid.*, 23-24.

⁴⁰⁸ Armstrong, “From Constantinople to Lakedaimon: Impressed White Wares,” *Mosaic. Festschrift for A.H.S. Megaw*, J. Herrin, M. Mullett and C. Otten-Froux, eds., British School at Athens Studies 8 (London, 2001), 63-64. The White Wares not published by Droop and Dawkins, are preserved in the Victoria and Albert Museum.

⁴⁰⁹ J. Dimopoulos, “Byzantine Graffito Wares excavated in Sparta (12-13 Centuries),” in Çanak. *Late Antique and Medieval Pottery*, 345.

⁴¹⁰ *Ibid.*, 28.

⁴¹¹ Armstrong, “Zeuxippus Derivative Bowls from Sparta,” in J. M. Sanders, ed., *Lakonian Studies in Honour of Hector Catling* (London, 1992), 1-9.

carination, three-coiled spirals at the center with some (5/29) bearing stilt marks.⁴¹²

Overall, in these samples the decoration is very simple and limited to incised horizontal lines, while the typical Zeuxippus circles in the center are not drawn by a steady hand.⁴¹³ Armstrong adds that all the pieces have a common fabric which varies from red to dark red depending on the firing conditions, and bears many visible small flecks and occasional small angular grey and purple grits.⁴¹⁴ These observations are in line with those of Dimopoulos who argues that the thirteenth-century sgraffitos in Sparta continue the practices of the twelfth-century sgraffitos but the quality is not as high.⁴¹⁵ The similarity of the fabric as well as the reference to tripod stilts discovered at Sparta, like Argos, qualifies it as a production site that was certainly active in the thirteenth century.⁴¹⁶ In fact, we are aware of a coarse pottery workshop which was discovered during the archaeological survey to the northeast and east of Sparta which was followed by a rescue excavation at the site of the medieval fortress in the village of Magoula, 1 km southwest of the Acropolis.⁴¹⁷ The fill of a later pit contained sherds of

⁴¹² *Ibid.*, 3-4.

⁴¹³ *Ibid.*, 7.

⁴¹⁴ *Ibid.*, 5.

⁴¹⁵ Dimopoulos, "Byzantine Graffito Wares excavated in Sparta (12-13centuries)," in Çanak. *Late Antique and Medieval Pottery*, 337.

⁴¹⁶ A. Bakourou, E. Katsara, P. Kalamara, "Argos and Sparta: Pottery of the 12th and 13th Centuries," in Ch. Bakirtzis, ed., *VIIe Congrès International sur la Céramique Médiévale en Méditerranée* (Thessaloniki, 1999) (Athens, 2003), 234.

⁴¹⁷ O. Vassi, "An Unglazed Ware Pottery Workshop in Twelfth-Century Lakonia," *BSA* 88 (1993), 287-293.

both plain and glazed vessels associated with a coin of Manuel I.⁴¹⁸ The coin evidence, together with the typology of the wares from the pit, allows Vassi to conclude that the workshop was active in the first half of the twelfth century.⁴¹⁹ The excavation in the Roman Stoa gives a fuller picture of the wares recovered from Sparta from the twelfth to the fourteenth centuries.⁴²⁰ The majority of the sgraffito samples are simple bowls with simple decorations, although there are noteworthy fragments such as the fragment bearing a flute-playing musician. Most of these fragments were broken before the application of glaze, possibly during the first firing, another sign of a workshop at or near the Stoa, even though the kiln remains unidentified.⁴²¹ Layers dated on the basis of amphora types and *comparanda* to late twelfth or the early thirteenth century contained fragments of Green- and Brown-Painted wares together with samples of Aegean wares and Measles Ware.⁴²² Wasters of brown and green glazed wares were found in layers dated to the second quarter of the twelfth century. The same contexts also revealed *champlevés*. Polychrome Type II Zeuxippus wares, late slip-painted wares and other sgraffito fragments belonged to the thirteenth-century layers.⁴²³ Sanders claims that the

⁴¹⁸ *Ibid.*, 287.

⁴¹⁹ *Ibid.*, 293.

⁴²⁰ G. D. R., Sanders, "Excavations at Sparta: the Roman Stoa, 1988-91. Preliminary Report Part 1. Medieval Pottery," *BSA* 88 (1993), 251-86.

⁴²¹ Sanders, "Excavations at Sparta: the Roman Stoa," 264.

⁴²² *Ibid.*, 267.

⁴²³ *Ibid.*, 284-285.

Green- and Brown-Painted Ware samples here are a decorative style of 1200-1250, and as such it regularly appears in contexts similar to the Type II Zeuxippus Ware. These Spartan examples are dated on the basis of similar samples from Corinth which were found in a pit in 1977 with a number of Latin imitative coins dating between 1204 and 1261.⁴²⁴ Like the Zeuxippus samples and the Green- and Brown-Painted wares, the Slip-Painted wares in Sparta have counterparts in Corinth from the same context as the Latin imitative coins with the same date range.⁴²⁵ The layers dated to the middle of the thirteenth century reveal samples only of “late sgraffito” wares, while those attributed to the early fourteenth century contain both Type II Zeuxippus wares and archaic maiolicas.⁴²⁶ Sanders adds that this latest deposit contains no samples of Metallic Wares, Brindisi Wares or the Veneto Wares but the single archaic maiolica jug sample represents the initial and the only sign of the influx of the Italian wares into Sparta.⁴²⁷ The number of finds does not allow Sanders to distinguish between the long-term accumulations of wares at the Stoa with the same degree of precision that was possible in the Athenian Agora. In the latter, coin finds enable finer dating which is not the case for Sparta. For example, Sanders’ dating of the archaic maiolica and Zeuxippus sherds to the early fourteenth century is about a half a century later than the Athenian dating.

⁴²⁴ *Ibid.*, 258.

⁴²⁵ *Ibid.*, 262-263.

⁴²⁶ *Ibid.*, 283-284.

⁴²⁷ *Ibid.*, 256.

In the next chapter I will present a more conclusive discussion of the changes in the ceramic production and trade during the twelfth through the fourteenth centuries, in the light of evidence from Italian sites and Corinth. I will also briefly mention that the Laconian survey once again provides a similar range of ceramics, confirming a similar variety of wares given in the discussion above.⁴²⁸ On the basis of the distribution of fine pottery and the number of churches newly constructed under the Komnenoi, the archaeological surveyors underscore the “prosperity” of the Komnenian period while they note a relative decline during the immediately following decades under Latin rule.⁴²⁹

Passing from Sparta to southwestern Greece, the excavations at Elis have produced evidence of only one building later than the fourth century B.C. which is a three-room house dating to the twelfth/thirteenth centuries around which the excavators found three graves.⁴³⁰ The house dates to the said centuries on the basis of a coin of Charles I of Anjou (1278-1285), two coins (a *tetarteron*, and a half *tetarteron*) of Manuel I which, according to the excavators, may have been later thirteenth-century

⁴²⁸ Armstrong, “The Byzantine and Ottoman Pottery,” in eds. W. Cavanagh, J. Crouwel, R.W. V. Catling and G. Shipley, *The Laconia Survey*, vol. 2 (London, 1996), 125-141.

⁴²⁹ Armstrong, “The Survey Area in the Byzantine and Ottoman Periods,” in *The Laconia Survey*, vol. 1, 364-366.

⁴³⁰ J. Coleman, *Excavations at Pylos in Elis* (New Jersey, 1986), 144.

imitations.⁴³¹ The glazed wares recovered from the site comprise a very small percentage of the total pottery. Very small fragments of pots and wares broken before the abandoning of the house were found. All except one were embedded in or immediately above the floors. In total, eight sherds of twelfth/thirteenth-century wares are recovered: one belongs to a jug that bears green dots on dark green brown background. The second one belongs to an unidentified form that bears green glaze on the rim. The third is a shallow plate or bowl with fine sgraffito decoration under a pale yellow glaze. The fourth belongs to a shallow bowl or a plate that bears sgraffito decoration under a clear glaze. The fifth sherd is the rim of a plate that bears Zeuxippus style concentric circles under a dark yellow glaze. The remaining three are small vertical handles which belong to a glazed vessel.⁴³² Judging from the evidence, excavators date the house to the twelfth century but it seems to have been used continuously through the late thirteenth century.⁴³³ Even though in Elis pottery constitutes a rather small group, we do see a range of different glazed wares the latest of which belong to the thirteenth century. Although it is not possible to make an assessment of the changing proportions of local and/or imported fine wares, it is significant that the Zeuxippus wares found their way to this site in southwestern Greece which was only 13 km east of

⁴³¹ *Ibid.*, 144.

⁴³² *Ibid.*, 147.

⁴³³ *Ibid.*, 149.

Clarentza, the capital of the Principate of Achaia. If as we have proposed earlier the Zeuxippus wares were produced at sites in the State of Nicaea, the commercial connections it established with Elis is worthy of note.

In part due to the classical archaeologists' lack of interest in things medieval, archaeological research in medieval Crete does not provide enough information to draw general conclusions about medieval pottery found there. For example, in a recent publication, Herrin notes that the medieval pottery of the excavation at the Knossos was never published.⁴³⁴ The survey conducted in 1972 in the lower Ayiofarango Valley singles out the "bowls with pale green glaze" as the most common finds which cover both the Byzantine period and Venetian rule in the survey area in southern Crete.⁴³⁵ In her study of the ceramic finds at the Chania (Hania) Museum, Natalia Poulou-Papadimitriou lists polychrome wares, slip-painted wares and Green- and Brown-Painted wares.⁴³⁶ Worthy of note is the presence of a single unfinished vessel from the Hagios Petros excavations of the green and brown category, which, she notes, was found in the same layer as the Slip-Painted wares.⁴³⁷ Excavation in Kastelli at Hania

⁴³⁴ J. Herrin, "The Byzantine and Arab Periods," in D. Huxley, ed., *Cretan Quests. British Explorers, Excavators and Historians* (Athens, 2000), 188.

⁴³⁵ D. Blackman and K. Branigan, "An Archaeological Survey of the Lower Catchment of the Ayiofarango Valley," *BSA* 72 (1977), 78. They note that "some of the sherds we identify as Venetia really belongs to this earlier period [Byzantine rule after 961]."

⁴³⁶ N. Poulou-Papadimitriou, "Μεσοβυζαντινή κεραμική απο την Κρήτη 9ον 12ον αιώνα," in *VIIe Congrès International sur la céramique Médiévale en Méditerranée*, 211-226.

⁴³⁷ *Ibid.*, 223. E. Bourbouhakis, "Βυζαντινά και μεσαιωνικά μνημεία Κρήτης," *AD* 23.B.2 (1968), 427-429.

adds sgraffitos to the above list. However, even though their presentation pays attention to the stratigraphy, the dating is done via ceramic *comparanda* from other sites in the absence of coins.⁴³⁸ The layers under the topsoil revealed Turkish Kütahya and Iznik wares respectively. The next layer bears sgraffito fragments together with Italian proto-maiolicas, which according to Hahn, “is richly represented among the finer table wares.”⁴³⁹ The contents of the next layer, chronologically earlier than the Italian maiolica and the contemporary sgraffitos, contained sherds of Roulette Ware, Slip-Painted wares as well as the sgraffito.⁴⁴⁰ The presence of the Byzantine wares together with the Italian imports is certainly evident; however, to ascertain the absolute chronology of the sequence of these wares in Hania, we will need to wait for future excavations. Since the slip-painted wares and the Green- and Brown-Painted wares belong essentially to the twelfth-century it seems that the island was supplied mainly with locally produced or imported Byzantine wares in that century. During the next century when the island was under Venetian control the Byzantine wares were supplanted by Italian wares which seem to have continued with the “local” sgraffitos—whose types and respective proportions are not defined—up until the appearance of the Turkish fine wares.

⁴³⁸ M. Hahn, “Byzantine and postbyzantine Pottery from the Greek-Swedish Excavations at Hania, Crete,” in V. Déroche and J.-M. Spieser, eds., *Recherches sur la céramique byzantine*, 227-246.

⁴³⁹ *Ibid.*, 232.

⁴⁴⁰ *Ibid.*, 232.

In Cyprus, the best known excavations were conducted in the northeast and the southwest of the island and both have revealed important information about the medieval pottery. The excavations at Enkomi near Famagusta, northeast of the island, revealed tripods and wasters alongside plain glazed pottery in yellow/yellowish brown glaze, slip-painted bowl, and broadly incised sgraffitos (with incisions painted in brown and green).⁴⁴¹ According to Bakirtzis, the light color of the clay, which ranges from pink to yellow, the low ring-shaped base, and the broad, flanged edge of the wares in Enkomi constitute their distinctive features.⁴⁴² These wares have in common with the wares from Paphos the vertical rims which form a curved angle with the body which, Bakirtzis notes, is a common occurrence in medieval Cypriot pottery.⁴⁴³ At the southwest end of the island, the best known sites are Paphos and Kouklia near Old Paphos. In Paphos, Bakirtzis studied the fine examples of Type II Zeuxippus Ware (with added touches of yellow/brown, not glaze painted as Type I) that were discovered during the excavations of the basilica and which she singles out for detailed stylistic analysis from among a “considerable quantity of Zeuxippus Wares.”⁴⁴⁴ From Megaw’s

⁴⁴¹ D. Bakirtzis, “Medieval Pottery from Enkomi, Famagusta,” in V. Déroche and J.-M. Spieser, eds., *Recherches sur la céramique byzantine*, 233-246.

⁴⁴² *Ibid.*, 243.

⁴⁴³ *Ibid.*, 243.

⁴⁴⁴ D. Papanikola-Bakirtzis, “Zeuxippus Ware: Some minor Observations,” in J. Herrin, M. Mullett and C. Otten-Froux, eds., *Mosaic. Festschrift for AHS Megaw*, British School at Athens Studies 8 (London, 2001), 131.

earlier work at Saranda Kolones in Paphos, we already know about the presence of earlier sgraffito wares as well as the Zeuxippus,⁴⁴⁵ but for a fuller discussion of the finds in the area it is best to turn to the results of the Kouklia excavation.⁴⁴⁶

The excavation from the Shrine of Aphrodite yielded an important number of glazed ceramics, even though the stratigraphy is “fragmented.”⁴⁴⁷ The different groups of wares conform to the brief description Megaw had given: brown painted wares, Green- and Brown-Painted wares, painted sgraffitos, Islamic (Fatimid?) wares, Zeuxippus, PSS Ware, *champlevés* as well as proto-maiolicas.⁴⁴⁸ Even though the stratigraphy is disturbed, the excavations at the Shrine have revealed a number of technically and stylistically homogenous groups of wares from the fillings and the graves. One such group from a fill includes monochrome sgraffito, Slip-Painted wares which are decorated with designs that include linear lines and animal (especially bird) motifs, and wares with concentric spirals and undulations such as the Zeuxippus

⁴⁴⁵ Megaw, “Supplementary excavations on a Castle Site at Paphos, Cyprus, 1970-1971,” *DOP* 26 (1972), 322-343. In this article Megaw refers briefly to the presence of earlier Byzantine wares before the advent of the Zeuxippus, such as the Constantinopolitan White Wares (of which there were “fragments”), polychrome wares, slip-painted wares and the green and brown painted wares. See, *ibid.* 342ff.

⁴⁴⁶ F. G. Maier and M. L. von Wartburg, “Ausgrabungen in Alt-Paphos,” *Archäologischer Anzeiger*, Heft 1 (1998), 105-132; J. Herrin, “Kouklia- Medieval Pottery,” *Report of the Department of Antiquities, Cyprus*, (Nicosia, 1973), 199-201.

⁴⁴⁷ M. L. von Wartburg, “Mittelalterliche Keramik aus dem Aphroditeheiligtum in Palaipaphos (Grabungsplatz TA),” *Archäologischer Anzeiger*, Heft 1 (1998), 134.

⁴⁴⁸ M. L. von Wartburg, “Cypriot Contact with East and West as Reflected in Medieval Glazed Pottery from the Paphos Region,” in *VIIe Congrès International sur la Médiévale en Méditerranée*, 153-166; same distribution in J. Herrin, “Kouklia- Medieval Pottery,” 200-201.

wares.⁴⁴⁹ These were found together with the brown and green sgraffito wares of which the insides were slipped while both the inside and the outside were covered in yellowish glaze.⁴⁵⁰ Likewise, the finds from trench 7A are referred to as “undisturbed:” these include a single fragment of sgraffito (yellowish glaze), another fragment of fine sgraffito (with light yellow glaze), five fragments of *champlevés* that bear leopard motifs. “Undisturbed and homogenous” are the fillings in trench 30A: here the excavators found three samples of slip-painted wares, a single sherd of monochrome sgraffito with dark green glaze, two more samples of monochrome sgraffito with yellow glaze, two fragments of brown and green sgraffitos, one of which resembles the PSS Ware.⁴⁵¹ Trench 12A had one fine sgraffito, two Aegean Ware fragments together with monochrome sgraffito ceramics.⁴⁵² Based on what we know from the Athens excavation, we can only assume that the first filling mentioned above possibly extends from the late twelfth through the early thirteenth century, since it contains the Slip-Painted wares together with the *champlevés* and the Zeuxippus wares. The “undisturbed” evidence from the trenches confirms the results from the Athenian Agora excavation. About the excavation from the east end of the Katholiki Church in Kouklia, Herrin writes that “in

⁴⁴⁹ von Wartburg, “Mittelalterliche Keramik aus dem Aphroditeheiligtum in Palaipaphos (Grabungsplatz TA),” *Archäologischer Anzeiger*, Heft 1 (1998), 137.

⁴⁵⁰ *Ibid.*, 137.

⁴⁵¹ *Ibid.*, 145-147.

⁴⁵² *Ibid.* 150.

connection with the ‘multi-colored sgraffito ware,’ the imported Italian wares must be mentioned. They are represented by several small bowls decorated using typical turquoise blue and brown colors...”⁴⁵³ Twenty-three sherds of Italian wares including maiolicas are mentioned in the excavations at the shrine of Aphrodite as well.⁴⁵⁴

Overall, from the excavations in Cyprus we learn, first, that sgraffito wares were produced in Cyprus; unfortunately we are in the dark about the type(s) produced. However, until a pit or a kiln is discovered we will not be certain whether the Cypriot repertoire was limited to sgraffito wares. Second, we also learn that the Cypriots either produced and/or imported nearly all of the groups of wares we saw in varying quantities in Greece and Asia Minor. The aggregate distribution of the wares and their relative chronologies, however, are not clear from the above discussion; we can nevertheless assume, based on Herrin’s observation about the “connection” between the late sgraffitos and the Italian wares, that the latter were imported to the island sometime in the thirteenth century, most likely after 1222, since no mention of Italian wares is made concerning Saranda Kolones Castle which was destroyed at that time. Future excavations will likely improve on the chronology of the twelfth- and thirteenth-century Cypriot wares.⁴⁵⁵

⁴⁵³ J. Herrin, “Kouklia- Medieval Pottery,” 200.

⁴⁵⁴ von Wartburg, “Mittelalterliche Keramik aus dem Aphroditeheiligtum,” 160-165.

⁴⁵⁵ Megaw, *Kourion Excavations in the Episcopal Precinct* (Washington D.C., 2007) does not refer to evidence after the eighth and the ninth centuries.

We started this chapter with three shipwrecks which demonstrate the significance of fine ceramic trade in the Aegean during the twelfth century. The Alonissos-Pelagonissos and the Kastellorizo shipwrecks also demonstrate, together with evidence from Athens, Cyprus and Boiotia that the so-called Aegean wares should be dated essentially to the twelfth century alongside the Green- and Brown-Painted wares and the Slip-Painted wares. Our survey of the remaining sites from Greece started from the northeast with Didymoteichon and continued through Sapes, Serres, Thessalonike, Thasos and Olynthus. Among these sites, Sapes, Serres and Thessalonike were certainly important production sites of fine ceramics in the twelfth century. Sapes and Serres seem to have continued as such into the thirteenth century, perhaps as production sites of Zeuxippus ware of the later thirteenth and the fourteenth century referred to as the “developed-style Zeuxippus Ware.” The major difference between the sites from northern Greece and those from the south is the relative scarcity of Italian wares from the north and their prevalence in the south from the second half of the thirteenth century on. In this sense, northern Greece shares a common characteristic with western Asia Minor. The first sites we discussed above that showed a virtual takeover by the Italian maiolicas in the thirteenth century are Butrint and Arta which were both controlled by the Epirote rulers in the thirteenth century. The influx of the Italian wares is equally visible at other sites in southern Greece: Thebes, Boiotia, Nafplion, Argos, Isthmia, as well as Crete and Cyprus in the eastern Mediterranean. Only the

relatively few number of Zeuxippus fragments set Epirote sites apart from the remaining Greek sites from the south that we have studied: it seems that in the thirteenth century Zeuxippus wares constituted a significant portion of fine ware imports in southern Greece. If, as we proposed earlier, the Zeuxippus Ware, especially its earlier types, were produced exclusively in western Asia Minor, the rise in the size of fine-wares produced under the Nicaean State in the thirteenth century and the growth of the size of western Asia Minor's fine ceramic exports to the Frankish states in Greece is significant. This phenomenon seems to have continued until the middle of the thirteenth century when this area turned to Italian fine ware types as the favored ceramic commodity. The best analysis of how this shift came about can be done by an analysis of ceramic evidence from Corinth which we shall turn to next.

CHAPTER 7

Italian and Zeuxippus Wares on Corinthian Tables: a Case Study on the Influx of Italian Maiolicas and the Export of Zeuxippus Wares

This chapter studies the changing aspects of fine ceramic imports during the thirteenth century through the lens of Corinth. I chose Corinth because it is a significant site where one is able to observe the sequence and the scale of the imports. In terms of imports into Corinth the most prominent fine wares of the eleventh and twelfth centuries are the Constantinopolitan White Wares and the Islamic luster wares. In the thirteenth century the Zeuxippus wares, from possibly the other side of the Aegean, but unproportionally more so the Italian maiolicas constitute the major imported wares into the city. Below we will discuss the changing scale of these imported wares on this site.

The Italian maiolicas occupy the largest group of imported wares that seems to have negatively affected the previous fine ware production at this site. Because of this, in this chapter, the origins and dating of Italian maiolicas warrant a side-by-side presentation alongside the Corinthian ceramic finds. This is especially important in understanding the challenges posed to the Byzantine fine pottery trade in the thirteenth century. We have seen in the previous chapter that Syrian pottery dominated the fine ceramic market in eastern Asia Minor by the middle of the thirteenth century. Below I will first discuss the development of the fine pottery production in Italy and link this, using the Corinthian evidence, with the increasing number of Italian wares that we

have already noted in the preceding discussion of the excavations in Greece concerning the thirteenth century.

There are two main technical differences between Byzantine fine wares and the fine wares of Byzantium's eastern and western neighbors. The first is the use of blue and the second is the type of glaze used. Byzantine potters, without exception, used a lead-based glaze while the potters to the east preferred to add tin to the lead, producing a glaze that did not run when fired and did not allow the pigments to mix.⁴⁵⁶ Italians, on the other hand, used both the tin and the lead-based glazes. However, the Italians most famously acclaimed type of fine ware—the maiolica—employed tin glaze, which not only does not allow the colors to run but also retains the whiteness of the slip and gives it a marble-like appearance, unlike the lead-based glaze which always bears a tinge of yellow or green and is never completely white or matte. It is therefore not surprising that the non-Byzantine potters preferred the tin glaze, especially on wares with motifs brush-painted on the slip. The Byzantine potters perhaps did not need to use tin glaze since the Byzantine trademark—the sgraffito ware—is not brush-painted; or else, even if it is painted in the incisions, this is done in variations of copper and iron oxide or manganese, colors whose effect is enhanced by the lead-based glaze even though the glaze darkens the whitish tone of the slip. Concerning the second distinction of Byzantine fine pottery, that is, the lack of use of cobalt/blue, we are in the dark. It was

⁴⁵⁶ "Tin-glazed earthenware," on-line *Encyclopedia Britannica* (last accessed 9. 10. 12)

used by the Syrians, the Seljuk potters of Asia Minor, and from the thirteenth century onwards cobalt blue was a favorite color of potters as far west as Spain.⁴⁵⁷ The closest color to blue used on Byzantine wares is the bluish green applied on the polychrome wares, such as can be seen on the sherds excavated in Corinth. The Byzantine potters are not known to use any pigment other than the oxides of lead and copper, and manganese; blue never entered the repertoire of the potters even though it certainly was used extensively by fresco and icon painters.⁴⁵⁸

In Italy the use of tin glaze preceded the use of blue paint in pottery, which was usually limited to the south. Tin-glazed pottery was made in Sicily and Southern Italy already by 1200, in Pavia in the early twelfth century, and in many other sites by 1250.⁴⁵⁹ The most famous of the tin-glazed Italian pottery, the maiolica, belongs to two different geographic groups. The first, the archaic maiolica, has standard green and brown painted motifs, while the proto-maiolica was usually made in brown and green but also

⁴⁵⁷ A. Caiger-Smith, *Tin-Glaze Pottery in Europe and the Islamic World. The Tradition of 1000 Years in Maiolica, Faience and Delftware*, (London, 1973), 55. Also see B. Rackham, *Guide to Italian Maiolica*, (London, 1933).

⁴⁵⁸ From what I could gather, the colorants used in frescoes and pottery are similar—oxides of iron and lead such as minium, limonite and ochre—except for azurite (for blue) which is copper carbonate. For two studies on chemical analysis of Byzantine church frescoes see, S. Sotiropoulou, et al., “Panselinos’ Byzantine Wall Paintings in the Protaton Church, Mounth Athos, Greece: a Technical Examination,” *Journal of Cultural Heritage* 1 (2000), 91-100 and C. Wales, “The Treatment of Wall Paintings at the Kariye Camii,” *Studies in Conservation* 3 (1958), 120-124. Also see C. Vogt, A. Bouquillon, M. Dubus, G. Querré, “Glazed Wall Tiles of Constantinople: Physical and Chemical Characterization, Manufacturing, and Decorative Processes,” in H. Maguire, ed., *Materials Analysis of Byzantine Pottery*, 54-55.

⁴⁵⁹ Caiger-Smith, *Tin-Glaze Pottery*, 83. According to Caiger-Smith, in Pavia a wall in the Torre Commune, built not later than 1100, contains bands of locally made bricks that have tin-glazed surfaces; a wall in the church of S. Lafranco in Pavia is ornamented with *bacini*. Tin glazed dishes with animal and geometric motifs were made in the early twelfth century.

had additional colors painted in blue and yellow.⁴⁶⁰ Because the proto-maiolicas were stylistically more appealing than the traditional green and brown earthenware, they spread to Europe by 1500 as did the products of the equally famous potters of Faenza where the Renaissance maiolicas were produced.⁴⁶¹ Scholars differ in opinion as to which type of maiolica was produced earlier and influenced the other; Whitehouse writes that although traditionally proto-maiolica was thought to precede the archaic maiolica, they were, in fact, more or less contemporaneous.⁴⁶² Indeed, as the brief discussion below will show, the exact dates are not clear, but on the whole both types of production seems to have begun sometime in the late twelfth and early thirteenth century.⁴⁶³ The main distinction between the two types of maiolicas, therefore, does not concern which was produced first, but rather their respective sites of production in Italy. The consensus is that archaic maiolica was produced in the north while the south (including Sicily) produced mainly the proto-maiolica. Whitehouse's words sums this consensus up best: "The earliest evidence thus points out that the earliest tin-glazed pottery made in Italy belongs to two families not one: archaic maiolica in the North and

⁴⁶⁰ *Ibid.*, 84.

⁴⁶¹ *Ibid.*, 103.

⁴⁶² Whitehouse, "The Medieval Glazed Pottery of Lazio," *BSR* 35 (1967), 70.

⁴⁶³ Caiger-Smith agrees with Whitehouse and writes that the archaic and the proto-maiolicas were contemporaneous: Caiger-Smith, *Tin-Glaze Pottery*, 83-84; Whitehouse, "Proto-maiolica," *Faenza* 66 (1980), 78.

proto-maiolica in the South.”⁴⁶⁴

The less specific category of the sgraffito wares, *all’Italiana*, on the other hand, was produced both in the north and the south of Italy in the twelfth and thirteenth centuries. Of the fine pottery produced in Italy, this category is closest to the Byzantine sgraffito both in its technique and style. The decorations, the colors used, even the glaze type are very close to their Byzantine counterparts. In terms of the glazing technique, for example, the *graffita arcaica* opted out of using lead-based glaze and began adding tin only in the fifteenth century.⁴⁶⁵ This well-known type of the Italian sgraffito ware, referred to in literature fully as the *graffita arcaica tirrenica*, was produced in the Ligurian coast, in particular, in Savona and Pisa in the twelfth and overwhelmingly in the thirteenth century.⁴⁶⁶ Whitehouse also mentions the “possibility” of the production of the *graffita arcaica* in Salento, “in the Byzantine tradition,” in the twelfth century.⁴⁶⁷ Venice and the Laguna also produced sgraffito wares within the first half of the

⁴⁶⁴ Whitehouse, “The Medieval Glazed Pottery of Lazio,” 70. On maiolicas in the Aegean see Vroom, *Byzantine to Modern Pottery in the Aegean*, 146.

⁴⁶⁵ *Ibid.*, 326.

⁴⁶⁶ H. Blake, “The Medieval Incised Slipped Pottery of North-West Italy,” in *La ceramica medievale nel Mediterraneo occidentale* (Florence, 1986), 323. Berti, Gelichi and Mannoni are in favor of the first quarter of the thirteenth century for the beginning of the production of the *graffita arcaica* in Savona. See, G. Berti, S. Gelichi and T. Mannoni, “Transformazioni tecnologiche nelle prime produzioni italiane con rivestimenti vetrificati (Secc. XII-XIII),” in G. Démians d’Archimbaud, ed., *La céramique médiévale en Méditerranée. Actes du VIe Congrès de l’AIECM 2* (Aix en Provence, 1997), 392.

⁴⁶⁷ Whitehouse, “Note sulla ceramica dell’ Italia meridionale nei secoli XII-XIV,” *Faenza* 68 (1982), 192.

thirteenth century,⁴⁶⁸ though Saccardo argues for the onset of their production after 1250.⁴⁶⁹ Archaic sgraffito had a wide distribution in southern France and the main production site for it is taken to be Savona. In Rougiers, for example, a total of 327 fragments of Savona sgraffitos were found.⁴⁷⁰ In Rougiers, Savona sgraffito fragments predominate in the thirteenth century when they were taken over first by the diffusion of the Italian archaic maiolicas from Pisa, Genoa and Savona (714 potsherds) and which seem to have become a preferred tableware at that time until they in turn came to be outnumbered by the maiolicas produced in Spain and Provence (about 1,500 potsherds) in the fourteenth century.⁴⁷¹

Excavations in Marseille, Hyères and Fos-sur-Mer recovered Günsenin I and Bakirtzis II amphorae dated to the eleventh to the thirteenth centuries but the archaeologists note that the Byzantine wares are “more visible” in the twelfth and the thirteenth centuries.⁴⁷² For example, early types of the Aegean wares were found both in

⁴⁶⁸ L. Lazzarini and E. Canal, “Ritrovamenti di ceramica bizantina ne’Laguna e la nascita del graffito veneziano,” *Faenza* 69 (1983), 31.

⁴⁶⁹ F. Saccardo, “Contesti medievali nella Laguna e prime produzioni graffite veneziane,” in S. Gelichi, ed., *La ceramica nel mondo bizantino tra XI e XV*, 201-236.

⁴⁷⁰ Demians d’Archimbaud, *Les Fouilles de Rougiers* (Valbonne, 1980), 360.

⁴⁷¹ *Ibid.*, 364-365, 386.

⁴⁷² L. Vallauri, G. Demians d’Archimbaud with F. Parent and C. Richarté, “La circulation des céramiques byzantines, cypriotes et du levant chrétien en Provence, Languedoc et Corse du Xe au XIVe siècle,” in *VIIe Congrès International sur la céramique médiévale en Méditerranée*, 145-146.

Nice and Marseille, where the Zeuxippus exceeded them in number.⁴⁷³ Byzantine wares overall usually represent a small number among the twelfth- and thirteenth-century layers, and the most common export type is unmistakably the Zeuxippus which disappears in the thirteenth-century layers as the exportation of these wares seems to have stopped although poorer quality Zeuxippus wares continued to be produced into the fourteenth century.⁴⁷⁴ Excavations in Marseille confirm this phenomenon concerning the importation of Byzantine wares there. Most of the 7,186 wares (coarse and fine) found in Marseille are dated to the period between 1190-1250 and excavators underscore the fact that concerning the table wares, it is the last phase, dated to 1230-1250, that consists of the Ligurian sgraffitos and maiolicas alongside “some wares of the Near East.”⁴⁷⁵ The introduction of the Spanish maiolicas, on the other hand, took place in the period after 1250.⁴⁷⁶ Among the finds, thirteenth-century Catalanian maiolicas are represented with 210 fragments, while archaic maiolicas from Albisola and Savona have 62 samples (dated from 1230 to 1275), and fourteenth-century maiolicas from Pisa are

⁴⁷³ *Ibid*, 147.

⁴⁷⁴ Vallauri, et.al. refer to the “rare” presence of PSS wares as well. See, *ibid.*, 149. Since the study is a survey of the finds from a number of sites and not an excavation report we do not have conclusive figures for the wares’ stratigraphy or for the changes underwent in the twelfth and thirteenth centuries.

⁴⁷⁵ M. Bouiron, ed., *Marseille, du Lacydon au faubourg Sainte-Catherine (Ve-XVIIIe s.). Les fouilles de la place du Général-de-Gaulle*, (Documents d’archéologie française 87. Série archéologie préventive. Paris, 2001), 137.

⁴⁷⁶ *Ibid*. Spanish maiolicas use tin glaze and lead based glaze together on the same ware. See, Berti and Mannoni, “Ceramiche medievali del mediterraneo occidentale; considerazioni su alcune caratteristiche tecniche,” in *Cerámica Medieval no Mediterráneo Occidental Lisboa 16-22 Novembro 1987* (Mertola, 1991), 163-174.

represented by 201 fragments.⁴⁷⁷ The Byzantine wares, on the other hand, amount to a mere four fragments in total, of which one, a jar, dated to the early twelfth century “may be” from North Africa or Sicily.⁴⁷⁸ Of the remaining three, two are referred to as Aegean wares and one as Zeuxippus from the thirteenth century, though the exact layers they belong to are not specified.⁴⁷⁹ An overview of the imports into eastern Provence in the thirteenth century once again confirms the overwhelming presence of the maiolicas from Liguria, Faenza and Tuscany.⁴⁸⁰ A similar observation seems to hold true for the chronology of imported wares in the southeast Mediterranean, although the Byzantine wares were imported there in larger amounts. Among the finds in Alexandria, Byzantine Zeuxippus wares, *champlevés* and other sgraffitos are “well represented” in the late twelfth- and early thirteenth-century layers, but are replaced by the PSS Wares from north Syria and by a “small number” of Italian maiolicas from Brindisi and Sicily in the thirteenth and fourteenth centuries when the layers in the city also yielded not only Turkish but also Egyptian, North African and Spanish wares.⁴⁸¹

⁴⁷⁷ Bouiron, *Marseille, du Lacydon au faubourg Sainte-Catherine*, 153.

⁴⁷⁸ *Ibid.*, 149.

⁴⁷⁹ *Ibid.*, 163.

⁴⁸⁰ G. Vindry, “Les céramiques italiennes medievales en Provence orientale,” in *Atti del Convegno Internazionale della Ceramica*. Issue 5 (Albisola, 1972), 245.

⁴⁸¹ V. François, “Contribution à l’étude d’Alexandrie islamique; la céramique médiévale de Kom el Dikka et Kom el Nadoura,” in *Alessandria e il mondo ellenistico-romano*, (Rome, 1995), 314-322.

The rise in the imports especially of the Italian and later Spanish fine wares in the thirteenth and fourteenth centuries seems to have instigated the local production in European cities. This is certainly noted to be true for Provence when the production of the fine lead-glazed wares began in the second half of the thirteenth century to the extent that by the end of the same century, excavators began to see a homogeneity of forms, decoration and glazing techniques in all the cities of Provence. This demonstrates not only the existence but also the expansion of specialized production in the region by the beginning of the thirteenth century.⁴⁸² The outset of ceramic production does not seem to be limited to Provence: among Byzantium's Serbian neighbors in the Balkans, the initiation of production of fine wares is also dated to the fourteenth century. In the Balkans, Byzantine fine wares seem to have constituted a favored model since the first ceramic workshops produced sgraffito wares glazed in green and yellow.⁴⁸³ A similar observation holds true for the first Bulgarian sgraffito wares of the thirteenth and fourteenth centuries.⁴⁸⁴ Overall, Byzantium's role in the development of the ceramic techniques in Italy and Eastern Europe in the twelfth and thirteenth centuries is important but it has to be perceived within the larger context of the eastern

⁴⁸² *Ibid.*, 242.

⁴⁸³ V. Bikic, "Byzantine Models on Serbian Medieval Pottery," in *VIIe Congrès International sur la Médiévale en Méditerranée*, 191-204.

⁴⁸⁴ I. Kuleff, R. Djingova and G. Djingov, "Provenance study of Sgraffito Ceramics (Thirteenth and Fourteenth Century) from Shumen, Varna and Tcherven," in Y. Maniatis, ed., *Archaeometry Proceedings of the 25th International Symposium* (Amsterdam, 1989), 533-542.

Mediterranean in which Egyptian and Syrian fine ware production techniques played possibly an even more significant role over a more extensive zone of influence. At least with respect to the expansion of the production of the lead-glazed sgraffito wares in Italy and the Balkans, however, Byzantium's role seems more eminent.⁴⁸⁵

The significant presence of Zeuxippus wares in thirteenth-century Italy, has led Gelichi to argue that northern Italy produced imitations of Zeuxippus types I and II.⁴⁸⁶ Meanwhile, the difficulty of distinguishing between especially the Venetian and Byzantine sgraffitos has already been mentioned by Lazzarini and Calogero.⁴⁸⁷ Gelichi argues that the earliest Zeuxippus samples come from excavations or are found in the form of *bacini* from churches adding that the production of the white slipped sgraffito wares first began in Venice in the early thirteenth century. He attributes some other wares previously thought to be Byzantine, such as the Roulette Ware and the Metallic

⁴⁸⁵ On a similar note, the possible influence of Corinthian glass-making on the development of the glass-making industry in Venice has been underscored: D. Whitehouse, "Glassmaking at Corinth: A Reassessment," *Ateliers de Verriers. De L'Antiquité à la période pré-industrielle* (Rouen, 1999), 73-78; A. Antonaras, "Two Venetian Vessels from Thessaloniki," *Museum of Byzantine Culture Journal* 6 (1999), 37-40.

⁴⁸⁶ S. Gelichi, "La ceramica bizantina in Italia e la ceramica italiana nel Mediterraneo Orientale tra XII e XIII secolo: Stato degli studi e proposte di ricerca," in S. Gelichi, ed., *La ceramica nel mondo bizantino*, 38; *idem.*, "Ceramiche e commerci con il Mediterraneo orientale nel tardo Medioevo (12-13 Secolo)," *Corso di Cultura* 38 (1991), 201-204; Berti, Gelichi and Mannoni, "Transformazioni tecnologiche," 396-399.

⁴⁸⁷ Lazzarini and Calogero, "Early Local and Imported Byzantine Sgraffito Ware in Venice: A Characterization and Provenance Study," in Y. Maniatis ed., *Archaeometry Proceedings of the 25th International Symposium* (Amsterdam, 1989), 583.

Ware, to local Italian producers.⁴⁸⁸ Gelichi also argues for a north Italian provenance for some Zeuxippus-style wares based on their overall distribution in the region. According to this distribution, in the course of the thirteenth century, Zeuxippus Type I B/C (monochrome orange-brown/dark green glaze) has so far been overwhelmingly found in Venice and the Laguna, while Class II (colors added into the incisions) is found largely in Genoa and the Liguria. Based on this observation, he assumes that the north Italian potters possibly produced not only Zeuxippus but other Byzantine and oriental fine wares in the thirteenth century.⁴⁸⁹ However, given the wide occurrence of the Zeuxippus wares, it has so far not been possible to pin down the exact production site(s) of these wares via chemical analyses,⁴⁹⁰ nor have morphological classifications been able to solve the problem of provenance.⁴⁹¹ For even if Gelichi's groupings are correct, the distribution of different Zeuxippus groups in northeast and northwest Italy could just as well be the outcome of a consistent difference in the sites from where Liguria and Laguna imported their respective Zeuxippus wares or it could be the outcome of a difference in chronology (Type II is thought to be later than Type I).

Therefore, until a Zeuxippus Ware-producing kiln site is discovered in northern Italy,

⁴⁸⁸ Gelichi, "La ceramica bizantina in Italia," 28.

⁴⁸⁹ *Ibid.*, 38.

⁴⁹⁰ Lazzarini and Calogero, "Early Local and Imported Byzantine Sgraffito Ware," 571. Chemical data from Byzantine sites are few, making it difficult to compare and assign provenance.

⁴⁹¹ Berti, Gelichi, "Zeuxippus Ware in Italy," in *Materials Analysis of Byzantine Pottery*, 85-94. The scarcity of comparable data limits the information we can gather from these analyses. Berti and Gelichi's analysis proves only that the "Venetian" samples are different than those from Paphos. See *ibid.*, 92.

or we have more conclusive chemical analyses, Gelichi's supposition will have to remain as such.

The presence of indubitable Byzantine wares in Italy is attested from the ninth and tenth centuries, when we find Constantinopolitan White Ware Group 2 in Venice, Genoa, Apulia and Sicily.⁴⁹² White Ware Group 3, according to D'Amico, is not well represented, but Campania, Apulia and Capaccio did yield sherds of Group 4, which even in Constantinople wane considerably in the thirteenth century. Overall, however, the evidence for Islamic pottery in Italian sites is "much stronger" than these Byzantine wares.⁴⁹³ The consistent presence of the polychrome wares (contemporary of Constantinopolitan White Ware with which it shares its origin), fine sgraffito, Zeuxippus, and Measles Ware not only in Venice, Genoa and south Italy but also in Lazio, Tuscany, Bologna, Ferrara and Parma shows the continuity of the ceramic trade through the thirteenth century between Byzantium and Italy.⁴⁹⁴ What we want to understand are the changes this trade underwent in the thirteenth century when the trends in trade of the previous centuries were reversed and the Byzantine sites in southern Greece and the islands began importing Italian fine ceramic wares in vast

⁴⁹² P. Arthur, "Byzantine and Turkish Glazed Ceramics in Southern Apulia, Italy," in Çanak. *Late Antique and Medieval Pottery*, 239-254.

⁴⁹³ E. D'Amico, "Glazed White Ware in the Italian Peninsula Proposals for a Study," in Çanak. *Late Antique and Medieval Pottery*, 228-235.

⁴⁹⁴ M. Milella Villechio, "Commercio e ceramica bizantina in Italia," Déroche and Spieser, *Recherches sur la céramique byzantine*, 95-107; François, "Sur la circulation des céramiques byzantine," 231-236.

numbers. We will be investigating the Italian evidence first before focusing on the imports into Corinth during the thirteenth century.

The profile of the fine pottery identified in Venice and the Laguna in the twelfth and thirteenth centuries include slip-painted wares, Aegean wares,⁴⁹⁵ sgraffitos,⁴⁹⁶ Zeuxippus wares and the Measles Ware. Among these, sgraffitos and the Zeuxippus wares seem to be much more frequent. Slip-Painted wares in and around Venice, for example, are recorded only in small numbers and so are the samples of Measles wares from the Peloponnese.⁴⁹⁷ In terms of the chronological sequence of the presence of the Byzantine wares in the region, researchers note that they become “visible” by the middle of the twelfth century and wane around mid-thirteenth century. The mid-thirteenth-century is the period when the region built up its own fine ware workshops and turned increasingly toward imports from further west such that, by the mid-fourteenth century, a great portion of the imported fine ceramics came from Spain.⁴⁹⁸ The only excavation conducted in this region that has some datable coins in addition to

⁴⁹⁵ Two samples printed in A. A. Bortolotto, *Storia della Ceramica a Venezia, dagli albori all fine della Repubblica*, (Florence, 1981), plate IX c and d which are said to be in a private collection.

⁴⁹⁶ Lazzarini and Canal, “Altra ceramica graffita bizantina dalla Laguna Veneta,” in S. Gelichi, ed., *La ceramica nel mondo bizantino tra 11 e 15 secolo*, 79-90. The list of sporadic finds in Venice from various churches and sites are without an exception referred to as “sgraffito.” The list contains 43 samples in total, twelve of them are identified explicitly as Zeuxippus Ware, one as Measles Ware and the rest are sgraffitos (including fine sgraffitos).

⁴⁹⁷ Lazzarini and Canal, “Ritrovamenti di ceramics bizantina in Laguna,” 27-29.

⁴⁹⁸ Michailidou, “Ceramica veneziana dalla citta medievale di Rodi,” 334.

ceramics was conducted in Torcello in a square between the church of S. Fosca and the Palazzo dei Consiglio. The excavators discovered a coin of Alexios I and a coin of Manuel I together with glazed Byzantine sgraffitos which constitute about 4 percent of the ceramics from their respective stratum.⁴⁹⁹ More recent excavations conducted at the church of S. Fosca's post-twelfth-century occupation levels revealed "significant numbers" of maiolicas, a few fragments of Raqqa ware and Spanish maiolicas: no Byzantine ware was found in this thirteenth-century context.⁵⁰⁰

A similar though equally incomplete picture, emerges from Genoa and Liguria. First of all, the types of Byzantine wares imported to Laguna and Liguria are largely the same, except that the earliest Aegean Ware type (similar to the pottery in Alonissos shipwreck)⁵⁰¹ and Peloponnesian Measles Ware are found only in Venice, and that the Green- and Brown-Painted wares are found only in northern Liguria.⁵⁰² The samples are so small, however, that it is not possible to give this observation much weight.⁵⁰³ Otherwise, in Genoa as in Venice, sgraffitos and the Zeuxippus wares constitute the

⁴⁹⁹ L. Leciejewicz, E. Tabaczynska, S. Tabaczynski, *Torcello Scavi 1961-62* (Rome, 1970), 38-39, 52.

⁵⁰⁰ Leciejewicz ed., *Torcello. Nuove ricerche archeologiche* (Roma, 2000), 16.

⁵⁰¹ See above Part 2, n. 495.

⁵⁰² See Sauro Gelichi's reference to the *bacini* in Casteldelfino: Gelichi, "La ceramica ingubbiata medievale nell'Italia nord-orientale," 355. Blake noted four green and brown painted bowl/plate on the façade of S. Maria Betlemme in Pavia and adds that similar painted and incised samples are found in the church of S. Lazarro in Pavia. See, Blake, "The medieval Incised Slipped Pottery of North-West Italy," 318-319.

⁵⁰³ Bortolotto refers to two plates, which he claims was found in a shipwreck in the Adriatic (no source given). See above Part 2, n. 495. Blake refers to four vessels painted in green and brown.

most common Byzantine ceramics and imports of these wares dries up by the middle of the thirteenth century.⁵⁰⁴ Some of the samples from early thirteenth century are *bacini* from the churches in Pisa and Genoa.⁵⁰⁵ At the excavation of the area south of the convent of San Silvestro, Andrews and Pringle found over 20,000 fragments of pottery (of which they discuss only 245) dated predominantly to the twelfth and thirteenth centuries roughly contemporary with the church.⁵⁰⁶ Among the finds dated, again to the same centuries, are three sherds of Byzantine Slip-Painted wares, twelve sherds of Byzantine sgraffito, tin-glazed wares from the Magreb, green glazed wares from North Africa and Spain, possible pieces of PSS Ware and two fragments of Raqqa Ware from Syria. The excavators note that the thirteenth century saw a decrease in the number of imports: “imported fine table wares were gradually replaced by Italian glazed wares during the course of the thirteenth century,” a very important development, since before the thirteenth century “almost all” the fine wares had been imports.⁵⁰⁷ Of the

⁵⁰⁴ Gardini explicitly states that the importation of the best represented Byzantine ware, the Zeuxippus, ceases after the first half of the thirteenth century. See, Gardini, “La ceramica bizantina in Liguria,” in ed. S. Gelichi, *La ceramica nel mondo bizantino tra 11 e 15 secolo*, 68.

⁵⁰⁵ Blake lists 10 *bacini* (three of which bear tripod marks) from two churches. See Blake, “The medieval Incised Slipped Pottery of North-West Italy,” 319.

⁵⁰⁶ D. Andrews and D. Pringle, “Lo Scavo dell’area sud del convento di San Silvestro a Genova,” *Archeologia Medievale* 4 (1977), 210.

⁵⁰⁷ Andrews and Pringle, “Excavations in Medieval Genoa 1971-1976: the Palace and Convent of San Silvestro; with a Note on the Animal Bones by Judith Cartledge,” H. Blake, T. W. Potter and D. B. Whitehouse, eds., *Papers in Italian Archaeology, BAR Supplementary Series* 41, (Oxford, 1978), 355-356. Unfortunately, the percentages of the imports are not given. For similar observations concerning the beginning of local production in the thirteenth century see, A. Gardini, R. Gorichchi and P. Odone, “I Tipi

imported wares at the Palazzo Ducale excavations in Genoa,⁵⁰⁸ seventy percent is classified as Islamic, while the rest are Byzantine, collectively extending from the end of the eleventh century to the first half of the thirteenth.⁵⁰⁹ Among these imports, non-slipped monochrome glazed wares constitute an important part while the decorated wares (painted or incised), of which the Byzantine sgraffitos are a part, constitute about eleven percent of the total. The Byzantine imports are listed as Slip-Painted wares, polychrome wares and sgraffitos among which the Zeuxippus looms large.⁵¹⁰ Between the second half of the thirteenth and the beginning of the fourteenth century, Gardini notes here too a steady rise in the Spanish imports from Malaga and Valencia followed by the golden age of the local wares during which nearly eighty percent of the finds are represented by Ligurian ceramics.⁵¹¹

Apart from the excavations, another important group of evidence of Byzantine ceramics in Italy comes from the *bacini* built into churches for decorative purposes.

These *bacini* do not provide the kind of detail we need about the major trends in imports

ceramici usati a Genova dai Fieschi nei secoli XIII e XIV,” in *Atti del Convegno Internazionale della Ceramica* (Albisola, 1972), 38-40; Mannoni, *La Ceramica Medievale a Genova e nella Liguria* (Genoa, 1975), 172, 176.

⁵⁰⁸ Gardini, “La ceramica bizantina in Liguria,” in S. Gelichi, ed., *La Ceramica nel mondo bizantino tra XI e XV Secolo*, 44-77.

⁵⁰⁹ *Ibid*, 72.

⁵¹⁰ *Ibid*; Also see, D. Cabona, A. Gardini, O. Pizzolo, “Nuovi dati sulla circolazione delle ceramiche mediterranee dallo scavo di Palazzo Ducale a Genova (secc. XII-XIV),” in *La Ceramica medievale nel Mediterraneo occidentale*, 472-481.

⁵¹¹ Gardini, “La ceramica bizantina in Liguria,” 72; Cabona, A. Gardini, O. Pizzolo, “Nuovi dati circolazione,” 479.

and local production which have to come from carefully crafted and recorded excavations. Nevertheless, in north Italy Blake noted a number of churches in Bologna, Nonantola, Ravenna and Faenza that bear twelfth- and thirteenth-century Byzantine sgraffito *bacini*.⁵¹² There is a single Zeuxippus bowl in Parma at the Bishop's Palace, which was enlarged in 1231; eight others are identified on the outside of the wall of S. Antonio in Polesine at Ferrara, built between 1257 and 1270.⁵¹³ Pisa, Parma, Ancona and Ravenna are other cities in north Italy where Byzantine wares adorn the facades of the secular or ecclesiastical buildings.⁵¹⁴ In an excavation in Ferrara, Guarneri and Libretti unearthed Slip-Painted, monochrome glazed and fine sgraffito samples from the twelfth-century levels (fifteen in total) while the level pertaining to the first half of the thirteenth century revealed Zeuxippus (most frequent) and polychrome sgraffitos (second most common) in addition to the above (twenty-four in total).⁵¹⁵ Concerning the ceramic evidence of the thirteenth century, they note that among the fine wares the Byzantine wares have a "limited" presence, while the number of the local wares, especially those from the Veneto region, constantly rises until they become

⁵¹² Blake and S. Nepoti, "I Bacini di S. Nicolo di Ravenna e la ceramica graffita medievale nell'Emilia-Romagna," *Faenza* 70 (1984), 363-364.

⁵¹³ *Ibid.*, 364.

⁵¹⁴ Blake, "The Medieval Incised Slipped Pottery of North-West Italy," 319; Gelichi, "La ceramica ingubbiata medievale nell'Italia nord-orientale," 377.

⁵¹⁵ C. Guarnieri and M. Librenti, "Ferrara, Via Vaspergolo-Corso Porta Reno: ceramiche ingobbiate importate dall'area bizantina" in *VIIe Congrès international sur la céramique médiévale en Méditerranée*, 227. The article is not an excavation report; it does not contain any information on how the dating of the material was done.

predominant in the second half of the thirteenth century.⁵¹⁶ The end of Byzantine imports around the middle of the thirteenth century is thus unquestionable.

Maiolica Production in Northern Italy

According to the result of an excavation conducted in Orvieto, the earliest local maiolicas stem from the period between 1225 and 1250, dated as such on the basis of *comparanda* from other sites.⁵¹⁷ The maiolicas produced in Orvieto are decorated usually in green, yellow and black over a white slipped surface covered under a tin glaze.⁵¹⁸ The excavators have identified a total of twenty-one different forms on which the fine wares use a wide range of decorative motifs including humans, animals, fantastic animals, floral and geometric designs as well as coats of arms.⁵¹⁹ Whitehouse notes that in the state archive of Orvieto individual potters are recorded as early as 1211, and that by 1295 the potters of the city were numerous and important enough to form their own guild.⁵²⁰

In Tuscania, a town in Viterbo, archaic maiolica sherds were unearthed from the same context as the three coins struck at Viterbo between 1250 and 1350. According to

⁵¹⁶ *Ibid.*, 231.

⁵¹⁷ M. Bernardi, "La ceramica medievale della cisterna C," in *La ceramica orvietana del Medioevo* (Orvieto, 1985), 48.

⁵¹⁸ A. Satolli, ed., *La Ceramica orvietana del Medioevo* (Florence, 1983), 11.

⁵¹⁹ *Ibid.*, 23.

⁵²⁰ Whitehouse, "The Medieval Glazed Pottery of Lazio," 71.

Whitehouse, these maiolicas were of a decorative style that suggested that they belonged to a relatively early period in the production of maiolicas, which in Assisi, northeast of Tuscania, might have begun in ca. 1230.⁵²¹ Whitehouse adds that the earliest vessel that can be dated with certainty is a bowl from Orvieto decorated with the coat of arms of Charles I (1268-1273) while all the other datable “earliest” maiolicas he refers to date after 1250, based on his argument that the maiolicas were “already in use about the middle of the thirteenth century.”⁵²² Further south, a series of excavations at Lucera Castle revealed proto-maiolicas in a deposit sealed beneath an earth mound piled against the castle Frederick II built between 1223 and 1240, while abundant quantities of similar wares were found in the later thirteenth-century levels.⁵²³ Thus, even though the exact dates concerning when the production of fine wares, among them in particular the maiolicas, began is unclear, it is certain that they were becoming increasingly popular in north Italy, in Umbria and Lazio in the first half of the thirteenth century.⁵²⁴

⁵²¹ Whitehouse, “The Medieval and Renaissance Pottery,” *BSR* 40 (1972), 212-213, 216.

⁵²² Whitehouse, “The Medieval Glazed Pottery of Lazio,” 67.

⁵²³ *Ibid.*, 69.

⁵²⁴ For evidence from Rome see Whitehouse, “The Medieval Pottery of Rome,” eds. H. Blake, T.W. Potter and D. B. Whitehouse, *Papers in Italian Archaeology, BAR Supplementary Series* 41, (Oxford, 1978), 475-505. In the article Whitehouse argues that the evidence from Rome shows that tin-glazed fine wares were “widely used” in central Italy by the second quarter of the thirteenth century. Mazzucato argues for an earlier date in the late eleventh century for the beginning of tin glazed wares- not necessarily maiolicas: O. Mazzucato, *La Ceramica laziale dei secoli XI-XIII* (Rome, 1976), 27.

Maiolica Production in Southern Italy

Southern Italy is well known not only for its proto-maiolicas but also as the region that produced the RMR Wares alongside monochrome and polychrome tin glazed ceramics.⁵²⁵ As is the case in the north, there is no consensus on exactly when their production began but most agree on the period during which their production became abundant: this seems to have taken place about the middle of the thirteenth century.⁵²⁶ In Foggia, for example, maiolica workshops were established in the thirteenth century while in Brindisi proto-maiolica production increased “remarkably” between 1209 and 1246.⁵²⁷ The excavation in Mesagne affirms the appearance of the maiolicas in the first half of the thirteenth century, but adds that the ware goes on to an even greater splendor after ca. 1250.⁵²⁸ Likewise, the production of the well-known proto-maiolica of Sicily, the so-called Gela Ware, began in the first half of the thirteenth century.⁵²⁹ The first firm evidence of local production of tin-glazed kitchen wares in

⁵²⁵ Whitehouse, “Note sulla ceramica dell’ Italia meridionale nei secoli XII-XIV,” *Faenza* 68 (1982), 185-197.

⁵²⁶ *Ibid.*; Whitehouse, “Apulia,” in *La ceramica medievale nel mediterraneo occidentale* (Florence, 1986), 573-585.

⁵²⁷ S. Patitucci Uggeri, “La Proto-maiolica del Mediterraneo Orientale in rapporto ai centri di produzione italiani,” in *Corso di cultura sull’arte ravennate e bizantina* 32 (1985), 346-347.

⁵²⁸ Patitucci Uggeri, *La ceramica medievale pugliese alla luce degli scavi di Mesagne* (Mesagne, 1977), 236-237.

⁵²⁹ *Ibid.*, 355. D’Angelo, “Protomajoliques de Sicilie (XIIIe siècle)” in G. Démians d’Archimbaud, ed., *La céramique médiévale en Méditerranée*, 459-461.

Sicily comes from a kiln in Agrigento, active in 1223-1225.⁵³⁰ Based on the excavation in Marsala, Sicily and the *bacini* found in Pisa, D'Angelo argues that the tin-glazed wares decorated in black, yellow and green (sometimes with added blue)—the main colors used on the Gela Ware—were produced in Sicily in the first half of the thirteenth century, more specifically between 1225 and 1250.⁵³¹

What seems clear from the above discussion is that Italian fine wares became increasingly popular in thirteenth-century Italy, and sometime in the second quarter of the same century these wares seem to have almost completely replaced the imported wares in Italy. When we examine the evidence from Byzantine sites we note that Italian fine wares were not only becoming increasingly popular in Italy, they were also spreading to Byzantium in the thirteenth century. The transformation of the Byzantine ceramic market, in terms of fine ware supply, was affected by the developments in fine ware production in Italy. Around the middle of the thirteenth century, when the Byzantine fine wares in Italy fade out local wares in Italy seem to have been produced abundantly. The evidence from Italy sets the stage for examining one of the most well-documented sites in the European provinces of the Byzantine Empire. Having

⁵³⁰ Mazzucato, *La Ceramica laziale dei secoli XI-XIII*, 59-60; D'Angelo, "Aspetti della produzione della ceramica siciliana e scambi commerciali nel Mediterraneo durante il Medioevo," in *Atti del Convegno Internazionale*, 131-133.

⁵³¹ D'Angelo, "Le protomaioliche rinvenute a Marsala ed il loro rapporto con le ceramiche magrebine e le graffite tirreniche," *Archeologia Medievale* 18 (1991), 765-770.

discussed the evidence from Italy, I would now like to conclude by taking a close look at the evidence from Corinth.

Corinthian Ceramic Production and its Evolution

Local production of glazed pottery in Corinth began in the late ninth century with coarse wares which imitated the form of Constantinopolitan chafing dishes. By the middle of the tenth century coarse ware imitations extended to the Constantinopolitan White Ware forms which must have been imported to Corinth before that period.⁵³² These Constantinopolitan White Wares remained the main form of fine wares used in Corinth until the city started producing this time its own fine wares at the end of the eleventh century. When Corinth began its own fine ware production, Constantinopolitan imports became “exceedingly uncommon” in these layers, the dating of which is confirmed by the presence of the coins of Nikephoros III and Alexios I.⁵³³ According to Sanders, the first Corinthian fine ware finds include Slip-Painted, Green- and Brown-Painted wares, and fine sgraffito wares, while all these styles have “short life spans” between the last quarter of the eleventh and the first quarter of the

⁵³² G. D. R. Sanders, “New Relative and Absolute Chronologies for 9th to 13th Century Glazed Wares at Corinth: Methodology and Social Conclusions,” in K. Belke, F. Hild, J. Koder, P. Soustal, eds., *Byzanz als Raum. Zu Methoden und Inhalten der historischen Geographie des östlichen Mittelmeerraumes* (Vienna, 2000), 163.

⁵³³ *Ibid.*, 165.

twelfth century.⁵³⁴ As such, Sanders argues, they attest to a lively, competitive ceramic industry that continued without interruption, even after Roger II's attack on the city in 1147, into the thirteenth century.⁵³⁵ Morgan's work on the classification of the glazed wares excavated in Corinth attests to the liveliness of its ceramic industry. The variety of the different techniques and forms makes it quite difficult to distinguish the local wares. His catalogue and the kilns of the agora associated with the sgraffitos found in connection with coins of Alexios I and Manuel I, however, leave little doubt concerning the local production of the sgraffitos,⁵³⁶ which constitute by far the largest category of the glazed wares (840/1788) found at Corinth that were catalogued by Morgan in 1942. According to this catalogue the maiolicas constitute the second largest category (157), followed by Green- and Brown-Painted Ware (150), polychrome wares (86),⁵³⁷ Constantinopolitan White Ware (79), Slip-Painted Ware (76), monochrome (all brown) glazed wares (67), Measles Ware (63) and Islamic luster wares (63).⁵³⁸

Morgan's catalogue, of course, does not give us approximate dates for these wares found at Corinth; for this, it is best to turn to Theodora S. MacKay's discussion of

⁵³⁴ *Ibid.*, 166. Short life span compared to that of the Constantinopolitan White Wares.

⁵³⁵ *Ibid.*

⁵³⁶ C. Morgan, *Corinth Results of Excavations Conducted by the American School of Classical Studies at Athens vol. 11 The Byzantine Pottery* (Cambridge Mass. 1942), 116-120.

⁵³⁷ Sanders, "Byzantine Polychrome Pottery," in *Mosaic. Festschrift for AHS Megaw*, 89-103.

⁵³⁸ Morgan, *Corinth*, catalogue 178-345.

the pottery, which is particularly important for the dating of the thirteenth-century layers.⁵³⁹ She notes that the first appearance of the sgraffito wares that bear animal figures in fine sgraffito took place around 1180 and that these fine sgraffito samples were contemporaries of the Green-and-Brown-Painted wares.⁵⁴⁰ She dates the first appearance of the Zeuxippus Wares –which she refers to as “shiny olive incised ware” –to about 1200⁵⁴¹ and notes that it disappears in the later thirteenth-century deposits, together with the Aegean Wares.⁵⁴² MacKay also thinks that the Zeuxippus Ware, in view of the relatively small amount of it among the finds, was imported to Corinth mainly between 1200 and 1250.⁵⁴³ Although they start becoming visible among the deposits around 1180, MacKay notes that the Green- and Brown-Painted wares wane after 1250 as well.⁵⁴⁴ With the Zeuxippus, the Aegean, and the Green- and Brown-Painted wares fade out of the fine ceramic scene in Corinth around 1250. This group of wares date after the Slip-Painted wares, late sgraffitos, Roulette Ware, Metallic Ware

⁵³⁹ T. Stilwell MacKay, “More Byzantine and Frankish Pottery from Corinth,” *Hesperia* 36. 3 (1967), 249-320.

⁵⁴⁰ *Ibid.*, 304. Her dating is supported by the presence of the late eleventh-century coins.

⁵⁴¹ “The ware did not appear in levels that were earlier than the late twelfth century. It was very often found with the coins assigned to William Villehardouin, Corinth issue (1245-1250?).” See *ibid.*, 259.

⁵⁴² *Ibid.*, 258. Stillwell MacKay, “Pottery of the Frankish Period. 13th and early 14th Century,” eds., C. Williams and N. Bookidis, *Corinth: The Centenary: 1896-1996* (Princeton, 2003), 407-408.

⁵⁴³ Stillwell MacKay, “More Byzantine and Frankish Pottery from Corinth,” 259-260.

⁵⁴⁴ *Ibid.*, 304.

and the proto-maiolicas.⁵⁴⁵ Concerning the proto-maiolicas, the evidence suggests that the relative quantity of the sherds is “consistently greater” in contexts that also contain coins of William Villehardouin (1245-1250) and that “in deposits of the first half of the thirteenth century it appears in a considerably lesser amount.”⁵⁴⁶ Since the proto-maiolicas and the Metallic Wares were found in the latest deposits with a coin of Isabel Villehardouin (1297-1301), it is safe to assume that both of these groups survived into the fourteenth century.⁵⁴⁷ It is more or less clear, therefore, that the proto-maiolica first appeared in the first half of the thirteenth century when the Zeuxippus Wares were at their peak, and as their number rose, that of the Zeuxippus declined in Corinth.

It is worthy of note that the decline in the overall number of Zeuxippus imports and the rise in the overall numbers of the maiolicas were taking place simultaneously during a period in which the local population’s interest in purchasing glazed wares was rising consistently. According to Sanders, glazed wares represented about six percent of the total pottery in the middle of the twelfth century and their presence climbed to about twenty percent of the total in the middle of the thirteenth, which is a significant change from the late eleventh- and early twelfth-century levels when they represented

⁵⁴⁵ *Ibid.*

⁵⁴⁶ *Ibid.*, 257-258. Most of the French and Venetian coins found at Corinth too date from about the middle of the thirteenth century. See, K. M. Edwards, “Report on the Coins Found in the Excavations at Corinth during the Years 1930-1935,” *Hesperia* Vol. 6. 2 (1937), 250.

⁵⁴⁷ *Ibid.*, 251. Similar observations are repeated in Stillwell MacKay, “Pottery of the Frankish Period. 13th and early 14th Century,” in C. Williams and N. Bookidis, eds., *Corinth: The Centenary: 1896-1996*, 401-422.

only about two to six percent of the pottery at Corinth respectively.⁵⁴⁸ The rise in demand might of course reflect a significant improvement in the purchasing power of Corinthians, rather than reflect a shift in demand instigated by differences in taste between the twelfth and the thirteenth centuries.

Overall, the evidence from Corinth should be viewed together with the evidence from Italy concerning the initiation of the maiolicas and their exportation to the East, which first took place around the 1220s, with their production rising consistently thereafter, continuing into the fourteenth century—a phenomenon which can be traced among Corinthian ceramic remains. This development had a negative impact on the importation of especially the Zeuxippus wares into this area, judging by the excavated number of Zeuxippus fragments, but it also seems to have had a negative impact on the quality of the locally produced sgraffitos, as MacKay observes that the latter were conspicuously “more carelessly made and decorated” after the middle of the thirteenth century.⁵⁴⁹ If, as we proposed, the Zeuxippus wares were imported from the State of Nicaea, the negative impact that this must have had on Nicaean fine ceramic exports becomes obvious.

⁵⁴⁸ Sanders, “New Relative and Absolute Chronologies,” 166.

⁵⁴⁹ Stillwell MacKay, “Pottery of the Frankish Period. 13th and early 14th Century,” eds. C. K. Williams and N. Bookidis, *Corinth: The Centenary: 1896-1996*, 410.

Thus, the arrival of the Italian maiolicas mark the beginning of the deterioration of the quality of the locally produced fine wares in Corinth. In addition, competition from the Italian maiolicas reduced imports of the Zeuxippus wares. Corinth was a major fine ware production site of twelfth-century Byzantium. It is in fact one of the sites that broke the dominance of Constantinopolitan White Wares at the end of the eleventh century and became a significant exporter of its fine wares. Because scientific analyses of Byzantine wares have not yet reached desirable levels we do not currently know the significance of Corinth *vis à vis* other production sites as an exporter both within Byzantium and outside of it, in particular, during the twelfth century. Yet simply the scale of fine wares in Corinth and the similarity of the sgraffitos found there with those found across the twelfth-century Byzantine world suggest that it was one of, if not the most important, fine ware producer of the twelfth century. This situation changed in the thirteenth century. It seems to have left its hegemony to Zeuxippus producers, who quite likely from the areas under the control of the Nicaean state. The Zeuxippus wares are the latest Byzantine fine ware types exported to Europe as we have seen from the evidence discussed on Marseille, Provence, Venice, Genoa, Lazio, Ferrara, Pisa and others. Evidence from Corinth shows that the Zeuxippus wares were unable to compete against the more popular Italian maiolicas, which, as we have also discussed in this chapter, were produced around 1200 and began to be exported outside of Italy in the 1220s. Roughly the middle of the thirteenth century, then, marks the beginning of the

end of Byzantine fine ware exports. The same period corresponds to the increasingly dominant presence of Italian and European wares in Byzantine settlements. Corinth thus serves as an important case study for the major changes that affected the scale of fine ware production in Byzantium, because it allowed us to see all the major developments with respect to ceramic production and export/import trends of the thirteenth century that left their mark on its soil.

Conclusions to Part 2

The preceding chapters have offered the most comprehensive site by site review of pottery assemblages on late Byzantine and related sites ever attempted from the perspective of economic history. From it, several points emerge very clearly. First, we have established and confirmed the chronology of the twelfth-century wares on the one hand, and the thirteenth-century wares, on the other. According to this relative chronology, the most important glazed fine Byzantine wares of the twelfth century were the Green- and Brown-Painted wares, Slip-Painted wares, the fine sgraffito wares, as well as the *champlevés*. The shipwrecks, numismatic and archaeological contextual evidence unanimously confirm that these wares belong essentially to the twelfth century, even though they might have remained in use in the first decades of the thirteenth century. The Kastellorizo and the Alonissos-Pelagonissos wrecks, carefully stratified excavations such as the ones conducted in Athens and Corinth, together with numismatic evidence, support this view, and I have noted no evidence in other archaeological reports and surveys that contradicts it. The Butrint excavations have provided a handy chart for both the twelfth- and the thirteenth-century fine ware relative chronologies which is confirmed in this study. The ware types mentioned in these pages summarized in the Boiotia chart can be used with confidence for understanding relative chronologies.

In terms of the economic development of the Byzantine Empire from the eleventh to the twelfth century this chapter shows, secondly, the significance of Constantinople in the production of exported fine ceramics. We have noticed that the Constantinopolitan White Wares were exported to various sites within the empire and outside its borders. We have seen fragments of these wares in Al Mina, Keman Kalehöyük, Anaia, Amorium, Magnesia ad Meandrum, Karacahisar, Myra, Hierapolis, Milet, Ephesos, Troas, Pergamon, Thessalonike, Argos, Sparta, Cyprus, and Corinth in this study. The White Wares were also exported further afield; they were Byzantium's one and only exported fine ware type until the emergence of the so-called provincial wares. In fact, archaeologists have shown that the types dating to the tenth to the thirteenth centuries are found in south Russia, Bulgaria, and as far to the northwest as Sweden.⁵⁵⁰ Italy too imported them in varying quantities, as we have seen. The dominance of the capital in the fine ceramic ware production of the empire up until the latter half of the eleventh century is quite telling.

The eleventh century, especially its latter half, marks an important turning point. This turning point is embodied by the red-bodied fine wares of the provinces which first appear in the eleventh-century archaeological layers of the capital and elsewhere in the empire. Constantinople was thereafter no longer the sole producer of Byzantine fine wares.

⁵⁵⁰ Vroom, *Byzantine to Modern Pottery in the Aegean*, 62-63, 74-77.

But what exactly do we mean when we say “the provinces”? For the late-eleventh and the twelfth centuries, evidence invites us to look more intensely at southern Greece, specifically in the vicinity of Corinth. Of the earliest provincial wares, such as the Green- and Brown-Painted wares and the *champlevés*, but most importantly, collectively, both the types and the numbers of these wares are highest in southern Greece. This suggests but does not prove that they were produced there. Regarding Corinth we are certain that sgraffito was produced there in the twelfth century. We are also aware that Sparta had an active kiln in the twelfth century. A glance at the fine ceramic chart provided in the appendix will suffice to see that there are more candidates for production sites in southern Greece, but we are unsure as to when they were active and what type of wares they produced. Still, for the twelfth century, available evidence indicates that by “the provinces” we actually mean definitely Corinth, but perhaps a few other sites in southern Greece. Pergamon is the only site in western Asia Minor that has three of the twelfth-century types, i.e. the slip-painted wares, *champlevés*, and the sgraffitos. Spieser, however, thinks that Pergamon was possibly developed in the late twelfth century and “most of the concentration of activities is in the thirteenth century.” So can we say that Pergamon and other sites in western Asia Minor as well as Constantinople (not to say Kinet in Syria, Nice, Marseille and Alexandria) were acquiring their fine wares essentially from southern Greek site(s)?

A comprehensive dataset incorporating the chemical analyses of each and every site's ceramic finds may well be able to settle this point.

Late twelfth-century sgraffito ware, wherever it was produced, appears literally at every site within the empire. The growth in the demand and supply of the sgraffitos itself can be surmised from the sgraffito fragment counts in the excavated sites such as Korucutepe, Taşkun Kale, Troas, Thassos, Corinth and Athens, to name a few, where the sgraffito group constitutes the highest fragment counts. This ware group also constitutes one of the two most important Byzantine fine wares exported abroad. The other type (which is a distinct subset of the sgraffito group) are the thirteenth-century Zeuxippus wares which must have followed on the heels of the growth of the Byzantine sgraffito market and the demand for these wares. The use of tripods in production show that growth in the supply of the sgraffitos came in the first half of the thirteenth century--exactly when the sgraffito market expanded. Where were the Zeuxippus wares produced? We think that during the first half of the thirteenth century it was produced primarily in the State of Nicaea. We know for sure that twelfth-century's only known ceramic-production superstar, Corinth, imported these wares. It is certainly true that the Zeuxippus wares, or their derivatives have been found at various places in the Mediterranean basin, the Aegean and the Black Sea during the first half of the thirteenth century. Al Mina, Kinet, Anemourion, Cyprus, Alexandria, most sites in western Asia Minor, Constantinople, a significant number of sites in all of Greece, Italy, mostly in the

north but also possibly in Otranto, Nice, Marseille: among the sites studied here, all have evinced important numbers of Zeuxippus fragments. Now, because Angevin Italy is known to have produced insignificant amounts of Zeuxippus wares and because Angevin Italy's connection with southern Greece was both politically and economically strong in the thirteenth century, I argue that if southern Greece were a significant Zeuxippus producer, we would have seen signs of it in Angevin Italy just as we have observed in relation to numismatic evidence. I therefore think that southern Greece can be ruled out as a source of the Zeuxippus wares.



Fig. 2. 8. Zeuxippus Ware Fragments from Anaia Excavations. F. İnanan, "Anaia-Kadıkalesi: A New Zeuxippus Ware Production Centre," E. M. Doksanaltı, E. Aslan, eds., *Proceedings of the International Symposium "Trade and Production Through the Ages. Konya, 25-28 November 2008,"* (Konya, 2010), 115-127, Fig. 4.

The highest concentrations of this ware, however, come from Ganos (with wasters that belong to Zeuxippus type 1), Smyrna and Anaia—another possible production site

of the Zeuxippus. Future research on Zeuxippus wares should, in my view, focus on the sites under Nicaean control and inspect this area carefully for some of the more important centers of production of these wares.⁵⁵¹ Whether the Zeuxippus wares found on sites under Frankish and Venetian control in Greece were actually coming from western Asia Minor can truly be determined by scientific analyses. The same can be said for the Zeuxippus wares found in Syria, Egypt (Alexandria) and Europe (especially Italy, particularly its north). If sites under Nicaean control and the northern coast of the Propontis (these fragments are dated to late thirteenth century) were significant sources of this ware type what this suggests for the scope of Nicaean trade is indeed tantalizing.

My last two conclusions concern the proto-maiolicas, their arrival in Greece (and not in western Asia Minor), and the end of the Zeuxippus exports to both the East and the West around the middle of the thirteenth century. The evidence from mainland Greece and Asia Minor shows that the last main export item of the Byzantine sgraffito peters out from foreign sites in the thirteenth century. This situation contrasts with the lively regional trade that one can discern from the shipwrecks in the Aegean and the Propontis in the late twelfth century, and from the excavations conducted in Greece on

⁵⁵¹ Also see Vroom, *Byzantine to Modern Pottery in the Aegean*, 109 and J. Dimopoulos, "Trade of Byzantine Red Wares, End of the 11th -13th Centuries," M. M. Mungo, ed., *Byzantine Trade, 4th- 12th Centuries* (Surrey, 2009), 184. But the discussion is far from being over: See, D. Papanikola-Bakirtzi, "Byzantine Glazed Ceramics on the Market. An Approach," in C. Morrisson, ed., *Trade and Markets in Byzantium* (Washington D.C., 2012), 211, where she argues that "the cradle of the Zeuxippus Ware should be sought within the coordinates somewhere between Thrace and the Black Sea coast, as far as the Crimean Peninsula."

sites dated to the twelfth and the thirteenth centuries as well as evidence from Italy and southern France. It seems that around the middle of the thirteenth century, Byzantine exports to these regions came to a halt, while the remaining fine ware producing Byzantine cities such as Serres, Thessalonike, Sparta, Corinth, and Athens became suppliers of local demand alone. Furthermore, in becoming local suppliers, it seems that the local potters in southern and western Greece were hit much harder than their counterparts in western Asia Minor and northern Greece, judging from the complete absence of the Italian maiolicas and relatively small number of PSS Wares in these latter areas. Of course, the political situation created after 1204 may partially explain this difference between these two areas: southern Greece on the one hand, and northern Greece and western Asia Minor on the other. In view of the fact that proto-maiolicas were produced in southern Italy (again, Angevin Italy) it is not surprising to find these wares in southern Greece. The fact that these maiolicas did not find their way into northern Greece and western Asia Minor, especially if the indeed the latter was an important Zeuxippus producer in the thirteenth century, could be another indicator of the active involvement of the Nicaean state in controlling the economy and limiting the scale of competition for the highly successful Zeuxippus wares.

The new archaeological evidence of Byzantine fine ceramic production and distribution describes a thriving production beginning in the eleventh century with persistent and significant exports to Europe and the Middle East in the twelfth century.

This sequence is followed by changing patterns of production and distribution of Byzantine fine wares in formerly Byzantine lands in the hands of Italian, French and Greek successors in the thirteenth century. The disappearance of Byzantine fine wares from foreign markets took place in the thirteenth century, especially in its second half, even as the new finished products from Italy began to compete with and replace the higher-end ceramics that Byzantium had once produced for itself and for export. Former Byzantine lands slowly shifted after the middle of the thirteenth century from exporters to importers of higher-end Italian ceramics. If this picture is correct, it conveys important signals about the broader transformation of the economy of the present and former territories of the Byzantine Empire between ca. 1100-1400, and illuminates from the perspective of the colonized, as it were, the rise of the global reach of the Western European economy, and especially of the two great Italian city states Venice and Genoa. But is it correct? Let us now turn to the independent testimony of one of the high value products for which Byzantium was justly most famous: silk textiles.

PART 3 Textile Production in Byzantium and Changing Trends in Luxury Textile Exports and Imports ca. 1100-1400.

Byzantium was famous for the extraordinary quality and value of its luxury textiles in the Middle Ages. That luxury textiles were deployed to realize the goals of imperial diplomacy, is well known. The luxury textiles were also an economically significant part of the empire's wealth by value, if not by volume. This part of our study offers an analysis of luxury textile production in Byzantium between ca. 1100 and 1300. As such the chapter gives a detailed account of the process by which Byzantium evolved from being a major producer, and an exporter of luxury textiles to both the East and the West, to becoming an importer of these textiles in the thirteenth century, which eventually suffocated the once-thriving local industry. This section, in other words, zooms in on the beginning of the end of Byzantine luxury textile industry. But first it goes back to lay out the scene and analyze the beginning of luxury textile production in the provinces, because, before the late eleventh century, written evidence suggests that most of the luxury textile production was concentrated in Constantinople. Not unlike what we have seen with the fine wares, the dominance of the capital in fine textile production waned sometime during the second half of the eleventh century. Since this change is important, this section begins with a brief analysis of it in Byzantine luxury textile production. But first let us first lay out the limitations of our knowledge about luxury textiles.

What we Know, and Why Study Luxury Textiles: our Focus and Limitations

Production, consumption and exportation of luxury textiles constituted an important industry in Byzantium: it was one of the sources and markers of the wealth accumulated within the empire. From a purely economic perspective, therefore, this chapter complements what we have learned from the lower-value and more broadly preserved ceramics. Yet compared to ceramic production, in which one person could technically control all the different stages of production, textile production, especially luxury (above all silk) textile production, is a much more complex industry that requires a division of labor. For each raw material, be it wool, cotton, or flax, or a combination thereof, the initial stages involved turning the raw material into warp and weft. In the wool industry, for example, these stages would involve shearing, weaving, fulling, spinning, reeling, napping and then dyeing. Each was a labor intensive process, and at the very least dyeing was done by people with a specialized knowledge and skill set.¹ Silk processing and weaving was even more intense and specialized. It involved silkworm raising, reeling, winding, spinning, doubling, throwing, boiling, dyeing, cleansing, warping and weaving.² The understanding of the region(s) where luxury textile production concentrated and when is therefore relevant for our understanding of change in the more complex and advanced aspects of the Byzantine economy at large.

¹ F. Sorber, "The Making of Cloth. State of the Art Technology in the Middle Ages," in M. Dewilde, A. Eryvynck, A. Wielemans, eds., *Ypres and the Medieval Cloth Industry in Flanders* (Ypres, 1996), 21-32.

² L. Molà, *The Silk Industry of Renaissance Venice* (Baltimore, 2000), xiv.

We have to note here, yet again, that most of what we know regarding textiles that we see mentioned in inventories, wills, and literature concerns luxury items because the surviving records before the fourteenth century mostly concern the topmost levels of the society and their consumption habits. To give some idea of the relative value of textiles in this age before mechanical looms, we can look at land and other prices. For example, in thirteenth-century Byzantium, land prices were on average ten *hyperpyra* per 1.3 hectares of arable land, about seventy *hyperpyra* for the same size of vineyard land, cattle cost about twenty *hyperpyra* a head and adult slaves ranged between twenty and thirty *hyperpyra*.³ In the 1220s a silk cloth cost about twenty *hyperpyra*, worth, therefore, more than two hectares of arable land, and about as much as a slave. Colored garments of unspecified material ranged between 6-10 *hyperpyra*, approximating the value of up to 1.3 hectares of farmland.⁴ During the first decade of the next century, specifically in 1308-1309, one could buy a stone house with roofing for thirty-three *hyperpyra* in Macedonia.⁵ In terms of wages, in 1259 a border soldier (*akritas*) would receive forty *hyperpyra* for a year of service and in 1261 a sailor and an officer earned twenty-one and over thirty-six *hyperpyra* respectively annually.⁶ Hence, in the

³ For these figures see the tables in Morrisson and Cheynet, "Prices and Wages in the Byzantine World," 818-819, 832, 839-841, 847-848.

⁴ Chomatianos, *Ponemata*, 19. 61-62 (κοπτάνα) and 84 (discussed in detail below p. 467ff.).

⁵ P. Lemerle, A. Guillou, N. Svoronos, eds., *Actes de Lavra. Edition diplomatique* (Paris, 1977), vol. 2, 157-158.

⁶ Morrisson and Cheynet, 862.

first case silk cloth would be half the annual wage of a soldier and the entire annual wage of a sailor. Of course, there is much variation in the quality and the price of textiles, and even among luxury textiles there are variations. It is nevertheless clear that the higher the quality of textiles, the higher would be the social and economic status of its owner. Such textiles were extremely high value items.

The same can be said about the luxury textiles listed in Western church inventories and aristocratic wills. The textiles we encounter in church inventories, in particular the ones from rich sees, are usually liturgical vestments and as such they were deemed to have been representations of the divine and manifestations of its significance. They were used in the liturgy, and as such tended to be the highest-quality, the most expensive, exquisite textiles of the time. The gorgeous textile behind a medieval Madonna was a declaration, a sure sign of her sacrality. "If Christ poured out ever-living sacred blood, that blood had to be bright, living red not opaque or brown," so, as representations of the sacred, the items listed in papal registers are the best silks of the time, as close to and worthy of the divine as possible.⁷

In terms of the textile-related materials discussed, the evidence imposes an important limitation on this chapter: even though our questions concern textiles in general, over two-thirds of the discussion focuses on high-end silks. Regrettably, the

⁷ C. W. Bynum, *Christian Materiality. An Essay on Religion in Late medieval Europe* (New York, 2011), 58-59.

written and archaeological evidence allows us to see much less about high-end wool garments/cloths during the period we are focusing on. If one were to make another analogy with the chapter on ceramics here again, the fine wares discussed in those chapters represented less than ten percent of all of the ceramic wares used at any given site. Perhaps a similar assumption can be generously made about the high-end textiles; that is, the luxury textiles represent perhaps less than five percent of the textiles worn and used in Western and the Byzantine urban societies. As such they represent the consumption habits of the smallest and yet historically the most visible and economically most favored social strata within the West and Byzantium, i.e. the high clergy, and the secular elite, who usually in Byzantium had courtly connections. This section, in other words, perforce leaves out over ninety percent of the textiles worn and used within most of the Byzantine households and focuses exclusively on evidence on organized textile production, together with raw material production and their changing trends within the empire from ca. 1100 to ca. 1300. However, in terms of value and market share by value, these luxury items were surely considerably more important. If, as I am inclined to assume but cannot fully prove for lack of satisfactory information, domestic production was important in satisfying the textile needs of lower class individuals, then the luxury textiles loom much larger in the overall textile market in late Byzantium.⁸ The luxury items were the most desired items exported to the elites in

⁸ One needs to analyze the evidence about women and the weaving done in the household. There are

over 250 references to the loom from the eleventh through the fifteenth centuries which associate looms with women. Over two-thirds of these references are from the eleventh to the thirteenth centuries and they say more about the number of commentaries on Homer than about the frequency of the phenomenon in contemporary reality. One such set of examples, even though not fully devoid of commonplaces, showing continuity of domestic production throughout the Byzantine period and the association of women with weaving and spinning may be found in the lives of female saints. According to these texts, sitting at the loom, weaving and spinning are activities women do alone or in the company of other women. In the ninth-century *Life* of St. Athanasia of Aegina (BHG 180), for example, the saint is engaged in weaving at the loom by herself “sitting and weaving at the loom by herself (ιστὸν κατὰ μόνας ὑφαίνουσα), she saw a shining star descent as far as her chest.” In the tenth-century *Life* of St. Theodora of Thessalonike (BHG 1737-1738), on the other hand, Theodora sometimes “plies the very same loom” sometimes “grinds the very same mill” together with her daughter Theopiste with whom she lives in a single cell together: “ἐν ἐνὶ κελλίῳ καὶ μιᾷ τραπέζῃ τὴν διατριβὴν ποιμένων καὶ ποτὲ μὲν τὸν αὐτὸν ἐργαζομένων ιστὸν ποτὲ δ’ ἐν τῷ αὐτῷ ἀληθουσῶν μύλωνι...”: *Dumbarton Oaks Hagiography Database* (accessed 8.25.2012). For further references from the fourth and fifth century (St. Mary of Egypt) to the tenth century (Thomais of Lesbos) see, ed. A.-M. Talbot, *Holy Women of Byzantium. Ten Saints’ Lives in English Translation*, (Washington D.C., 1996), 80, 142, 188, 200, 203, 303-304. For a more conclusive statement, therefore, one would need to disassociate the mythological references such as the ones to Penelope and Arachne from the more historical ones. To cite a few historical references that I could glean from a cursive look at the evidence, Eustathios of Thessalonike, very unusually, mentions men weaving at the loom while Psellos on his account of Empress Zoe mentions that she was not interested in the feminine tasks such as the loom, the distaff, wool or weaving: Psellos, *Chronographia*, vol. 1 Ch. 6. 159, line 4; K. Metzler, ed., *Eustathii Thessalonicensis De emendanda vita monachica* (Berlin, 2006), Ch. 38, line 1. I do not know of any archaeological loom finds from Byzantium. The fact that looms were wooden structures reduced the probability of their survival in archaeological settings. Yet, occasional references to spindle whorls and loom weights do survive in the archaeological record. See for example, the references in these articles: D. Blackman, “Archaeology in Greece 2001-2002,” *Archaeological Reports* 48 (2001-2002), 53 on Theban loom weights dated to the eleventh/twelfth centuries. On a few looms from the Isthmia survey see, T. E. Gregory and P. N. Kardulias “Geophysical and Surface Surveys in the Byzantine Fortress at Isthmia 1985-1986,” *Hesperia* 59.3 (1990), 471, 478. Loom weights are also referred to (without periodization and discussion) in relation to the Asea Valley survey which is near Sparta: J. Forsén and B. Forsén, *The Asea Valley Survey. An Arcadian Mountain Valley from the Palaeolithic Period until Modern Times* (Stockholm, 2003), 294ff. In Byzantine Turkey, loom weights were found at the Amorium excavations, in the Lower City trench walls, dated to the tenth/eleventh centuries: C. S. Lightfoot, “The Amorium Project: The 1996 Excavation Season,” *DOP* 52 (1998), 328. Including Thebes, none of the above studies refer to significant numbers of this type of textile production-related archaeological remains to suggest “mass production,” above the level that would meet a household’s needs. This might be because of the narrow scope of studies individually; a collective analysis of all the evidence on a given site or area might reveal further insights. Perhaps a systematic study of textile-related archaeological remains can hint at areas where textile production was concentrated and it makes perfect sense to start this task from Boiotia where Thebes is located. I am unaware of a systematic analysis of weaving activity associated with whorls, looms and –and if they existed, pin-beaters– in a single site over time, of the type that is now available for Flixborough in the UK: C. Loveluck and P. Walton Rogers, “Craft and Technology-Non-Agrarian Activities Underpinning Everyday Life,” eds., C. Loveluck, et. al., *Rural Settlement, Lifestyles and Social Change in the Later First Millennium AD: Anglo-Saxon Flixborough in its Wider Context* (Oxford, 2007), 102-107. The closest work that I am aware of to this type of localized analysis is on southwestern Epiros. Kato

both the East and the West and as such render a good overview of their production and export trends within the two hundred years from the beginning of the twelfth to the end of the thirteenth centuries.

Overall, apart from production, this chapter aims to analyze the export trends of Byzantine luxury textiles mainly but not exclusively from the precious non-local evidence on Byzantine textiles, that is, evidence stemming from the foreign export of Byzantine products, and draws conclusions about what that evidence communicates regarding the Byzantine luxury textile production centers and changes in their export trends. Production and exportation are intimately related but are not mutually inclusive. The attestations of Byzantine luxury exports, their overall quantity and change over time, I believe, serve as strong evidence on the state of local production of luxury textiles.

The non-local evidence analyzed here is written in either Latin, Arabic or Hebrew. This evidence comprises written sources from a variety of mostly Western documents written in Latin and, even though much fewer in number, some Eastern sources which shed light on the export trends in Byzantine luxury textile products. The analysis presents a robust overview of the production sites in Byzantium as documented by Byzantium's exports after the second half of the eleventh century until

Vassiliki (west of Naupaktos) and the island of Kephalos (south of Arta in the Preveza Bay) both produced undated loom weights. See, Veikou, *Byzantine Epirus*, 441, 543.

the end of the thirteenth, even if the greater quantities of source materials skew the record toward the West compared to the East. Because it focuses on non-Byzantine evidence on Byzantine luxury products, the chapter also aims to clarify the changing trends in the export capacity of the Byzantine luxury textile production between ca. 1100-1300.

The second set of non-local evidence analyzed adds to the evidence from the written texts the material evidence of the actual textiles themselves. In other words, I study the Byzantine luxury textiles held in current European and North American museum collections and compare that evidence with what we know from medieval church and secular inventories. This section includes a brief overview of the potential that scientific/technical analyses bear for the correct identification of textiles which might change the provenance attributions textile historians currently accept. For it will become clear from the discrepancy between the provenances ascribed by museums and the provenances recorded by medieval inventory writers that there is an urgent need for a better technical analysis of the surviving textiles in museums. The archival records of the medieval inventories gain richness and depth by incorporating some, at least, of what contemporary Western literature makes of Byzantine luxury textiles.

One of the important missing links in our knowledge of Byzantine textile production is the fate of the Byzantine exports to the East after the twelfth century.

Until then we can rely on the Cairo Geniza which informs us that the luxury Byzantine textiles were exported to Fustat still in the twelfth century. We do not know the later history of Byzantine textile exports to the East because the published evidence from the Geniza does not go beyond ca. 1250.⁹ Unlike the section on ceramics which draws on evidence from the East in the thirteenth century, this section, as far as the scope of non-Byzantine evidence from the thirteenth and the early fourteenth centuries is concerned, will have to focus more heavily on Western evidence.

⁹ The latest document citing a Byzantine textile is dated 1155. The items referring to Fustat are usually brocades, however, the identity of the item cited in the 1155 document is not given in the appendix. See *Goitein* vol. 1, 46, 402 and vol. 4, 299-304 for the table. There may be evidence on Byzantine textiles in documents from after the middle of the twelfth century, but we will not know this for sure until the Cairo Geniza is fully published/translated.

CHAPTER 8 Byzantine Textile Exports

Textile Terms, General Observations on Terminology and Borrowings

Western civilization may have borrowed a good deal of its luxury textile terminology directly from Byzantium, and Byzantium seems to have borrowed, in turn, many terms from the East, from especially the Far East, including but not limited to, the home of silk-weaving, China.¹⁰ In this regard historical linguistics can potentially illuminate the history of goods and their transmission across different cultures and highlight important aspects of the history of that good or thing the word represents. The famous historian of Roman textiles, John Wild, writes that “a loan word often—but not invariably—implies a borrowed object, technique or concept.”¹¹ Loan textile terms in Greek and in Latin imply that Byzantium borrowed from the Far East and the West borrowed from Byzantium.

The terms for luxury cloths most often encountered in Western terminology—samites, *diaspers*, *sendals* (and later, satins and velvets) belong to either the family of patterned or the family of plain silks. *Sericon* (or less often *metaxa*), is a generic name for silk in Byzantine texts, even though there are other much more specific terms for silks, as we will see below. The term originates from China since Σῆρες (*Sêres*) are “the

¹⁰ For a quick overview of the surviving Byzantine textile terms used in western texts, see *Reallexikon der Byzantinistik*, P. Hirth, ed. (Amsterdam, 1970), Series A, vol 1.4, 383-387.

¹¹ J. P. Wild, “Textile Production and Trade in Roman Literature and Written Sources,” in eds. D. Cadron and M. Feugère, *Archéologie des textiles. Des origines au V^e siècle*. (Montagnac, 2000), 210.

Chinese people” in Byzantine Greek. To give another example, satin originates and takes on the name of the city of Zaitum in the Guanzhou province of China. *Sendal* may have originally been a Persian or Arabic term but the westerners learned of this silk cloth type from the Byzantines by the eighth century, according to the Kahanes.¹² *Diasper*, literally, “double-white” silk cloth denotes--usually—a patterned silk; terms *diasper* and “the family” of samites (originally from *hexamiton*, “six-threaded,” with the more expensive *kataxamiton* and the less expensive *dimiton*, i.e., “double-threaded”) all originate from Byzantium.¹³ Velvet (Italian, *velluto*) was produced during a period in which the Italian industry began innovating in luxury textiles.¹⁴ Depending on their weaving techniques all of these fine silken textiles can be plain or patterned in simple tabby or the more complex twill-weave.¹⁵ Any samite, *diasper* or *sendal* (or satin or velvet) can be plain, made using the tabby or the twill techniques, and their variations. Or, these silks can be woven with patterns, which may be woven using the tabby or the twill weaving techniques.¹⁶ The variety of both the terms and the techniques used,

¹² *Reallexikon der Byzantinistik*, 386.

¹³ D. King, “Sur la signification de Diasprum,” in A. Muthesius and M. King, eds., *Collected Textile Studies* (repr., London, 2004), 71-76.

¹⁴ For velvet see D. King, “Types of Silk Cloth used in England 1200-1500,” in S. Cavaciocchi, ed., *La seta in Europa secc. 13-20* (Prato, 1993), 91.

¹⁵ For tabby and twill and their variations see, D. Burham, *Warp and Weft. A Dictionary of Textile Terms* (New York, 1981), 139, 155-160.

especially from the thirteenth century on, is simply mind-boggling and is itself a witness to prodigious development and importance of high-end textiles in this period. For the period before the thirteenth century, however, the importance of the Byzantine luxury textiles in at least the West is evident on the basis of borrowed terminology alone. Regarding what the East borrowed from Byzantium we do not know as much and not nearly enough. Eastern and Western exports to Byzantium of both textiles and textile terms are better known, and it will be addressed in the next chapter.

Centers of High-end Textile Production in Byzantium ca. 1050-1150

Sometime in the second half of the eleventh century, Constantinople lost its apparent monopoly on the production of luxury textiles. New centers arose in the provinces to compete with the centuries-old imperial center. We will analyze how patterns in luxury textile production changed in the provincial luxury textile production sites after that fundamental shift.

In the twelfth century, Corinth, Thebes, and Thessalonike appear to have been silk cloth production sites in the empire. The sources are relatively abundant and clear about the importance of this, especially for Corinth and Thebes. Scholarly opinion holds

¹⁶ See, King, "Types of Silk Cloth used in England 1200-1500," in S. Cavaciocchi, ed., *La seta in Europa secc. 13-20* (Prato, 1993), 459-463. For a very useful and sophisticated description of the basic weaving techniques used in silks see N. Atasoy, W. B. Denny, Louise W. Mackie, H. Tezcan, *Ipek: the Crescent and the Rose: Imperial Ottoman Silks and Velvets* (London, 2001), 217-225.

that before the twelfth century, luxury silk production was carried out exclusively in the capital, and in the twelfth century the Peloponnese and Thessalonike emerged also as provincial centers where silk cloths were made and woven.¹⁷ To my knowledge, no one has been able to discover when exactly the above-mentioned centers outside the capital (and perhaps a few others that we do not know of) began to produce silk and/or silk cloth and garments.¹⁸ Regulations in the early tenth-century *Book of the Eparch* and three tenth-century Byzantine silks, at least one of which bears the signature of the imperial workshop near the baths of Zeuxippus in Constantinople, all preserved in the museums in Berlin, Siegburg, and a reliquary at Aachen respectively, underscore the importance of the capital before the twelfth century.¹⁹

The Book of the Eparch mentions craft and merchant guilds in the capital; it set down the regulations governing either the luxury products or staples essential for the provisioning of the capital with which these guilds were concerned. It also regulated the notaries alongside the money changers stationed at the capital. As such, the eparch's book starts with notaries and money changers and lays out the rules for silk, linen, wax

¹⁷ Muthesius, "Courtly and Aristocratic Silk Patronage," in *Studies in Silk in Byzantium* (London, 2004), 90.

¹⁸ The closest reading of the sources in this regard is in Jacoby, "Silk in Western Byzantium before the Fourth Crusade," in *Trade Commodities and Shipping in the Medieval Mediterranean VII* (Ashgate, 1997), 452-500. Also see, Kazhdan and Epstein, *Change in Byzantine Culture*, 41.

¹⁹ The best secondary source for this is the appendix in Muthesius, *Byzantine Silk Weaving AD 400 to AD 1200* (Vienna, 1997); also see helpful overview by O. Falke, *Kunstgeschichte der Seidenweberei* (Berlin, 1913), 3-14. For the dating of the *Book of the Eparch* see J. Koder, *Das Eparchenbuch Leons des Weisen* (Vienna, 1991), 21-22.

and perfume merchants before concluding with saddlers, butchers, bakers and inn-holders, alongside other such craft guilds in twenty two chapters. It is the single most important source on guilds in Byzantium that leaves many questions on Byzantine economy unanswered still, especially about the existence of guilds other than the crafts listed in it or on the possible existence of guilds in cities other than the capital.²⁰ Mindful of these limitations, however, we will now turn our attention to the regulations of the *Book* on luxury cloth production in and imports to Constantinople, focusing on how this important legal text uses the term “outside,” and what we learn about silk production “outside” Constantinople.²¹

Given the explicit references in the *Book of the Eparch*, Constantinople was doubtless the primary producer of luxury silken cloths/garments at the opening years of the tenth century. The capital was at the same time an importer of silk cloths as well as raw silk. In this context, it is important to point out that the *Book of the Eparch* clearly states that at least in Constantinople, silk garments and silk cloths (χαρέρια, from Arabic “harir”) from Syria were sold, but silk cloth was also made in the capital, as

²⁰ See the differing views and complete bibliography in G. Maniatis, “The Domain of Private Guilds in the Byzantine Economy, Tenth to Fifteenth Centuries,” *DOP* 55 (2001), 351 n. 54. George Maniatis argues that there were no guilds outside the capital and after the twelfth century those too ceased to operate. See *ibid.*, 353-357 and *idem.*, “Organization and Modus Operandi of the Byzantine Salt Monopoly,” *BZ* 102. 2 (2009), 661-696. He cites the administrative burden and the lack of evidence from the provinces as reasons why the only evidence on guilds is indeed from Constantinople.

²¹ Maniatis does not doubt that there silk reached the capital from production centers inside and outside the empire either in the form of cocoons or reeled silk. He does not discuss, however, where these locations within the empire could possibly be: Maniatis, “Organization, Market Structure, and Modus Operandi of the Private Silk Industry in Tenth-Century Byzantium,” *DOP* 53 (1999), 267, 297-300.

shown by the presence of the local raw silk processors, who cleaned the raw-silk and sent it directly to the local silk-weavers.²² Concerning raw silk, the *Book of the Eparch* also explicitly states that it was imported into the capital to be processed (literally, “dressed”) there by the *katartarioi*. It is not clear, however, whether this unprocessed silk came from abroad or from elsewhere within the empire; the legal text simply says that raw silk came from “the outside.”²³ The Eparch forbade the raw silk dealers of the capital from selling raw silk outside the capital, specifically “to Jews or to merchants for reselling outside the City.” The wording clearly implies that there were buyers outside Constantinople (perhaps both Byzantine, but non-Constantinopolitan i.e. ἑξωτικός, and foreign, i.e. ἐθνικός), but it is unclear where exactly this occurred and for what purpose.²⁴ The reference to Jews cannot be coincidental either. The same statement also suggests that selling raw silk outside the capital was a common enough practice to call

²² J. Koder, *Das Eparchenbuch*, 4. 1. (on silk garments), 5. 1 on silk cloths from Syria and Seleuceia; section 6 on raw-silk dealers, and 8. 8 (on processed silk being sold to silk weavers).

²³ *Ibid.*, 7.1: “Οἱ τὴν μέταξαν καταρτίζοντες ἐμπορεύεσθωσαν ὅσῃν ἐργάζεσθαι δύνανται ἀπὸ τῆς ἑξωθεν ἐρχομένης μετάξης.” Also see *ibid.*, 7. 2. The text uses ἑξωθεν in seventeen other instances referring to silver or gold brought into the city by someone coming from the “outside” (2. 6), *vestioprates* (merchant of luxury garments) who are not allowed to sell any of the banned items (*kekolymena*, 4. 1) to an “outsider,” perfumes (5. 3), silks (6. 5, 7. 1, 7.2), fine linen (9. 1, 9. 7), as well as, wax (11. 3), soap (12. 6), grocery items (13. 4), sheep (15. 3), swine (16. 3), and livestock inspectors (21. 1, 21. 8). The livestock inspectors, for example, were required to take one *keration* each (1/24th of gold coin, the *nomisma*, so two *miliaresia*) per animal from those who dwell outside the city (the seller) and from those who live in the city (the buyer): “λαμβάνετω ὁ μεσιτεύσας καθ’ ἐν ἑκάστον ζῶον κεράτιον ἐν ἀπὸ τε τῶν ἐπιδημούντων ἑξωθεν καὶ τῶν ἐν τῇ πόλει.” (21. 1).

²⁴ *Ibid.*, section 6, especially, 6. 16.

for penalties. This legislation seems to have been promulgated to prevent that common practice.

Two points are clear so far: first, that raw silk was coming into Constantinople “from the outside,” and second, that it was also exported and perhaps even smuggled out of the city to be used elsewhere in silk cloth and/or garment production. As far as I am aware, from within the empire, two of the three pre-twelfth-century mentions of possible non-Constantinopolitan silk processing come from the Peloponnese, while the third establishes a connection with Cyprus. The first of the two is the tenth-century reference in Theophanes Continuatus to the wealthy Peloponnesian widow Danelis who sponsored Basil I; the second is the mid-eleventh-century *Life of Saint Nikon*.²⁵ In

²⁵ The tenth-century reference to Basil I in Theophanes Continuatus mentions a hundred female weavers (?) and silks (*sendals*) that Danelis, a wealthy land-owner from Patras, lavished upon Basil I as a loyal supporter when she was invited to the imperial reception at the Magnaura Palace after Basil’s coronation. For Danelis, her entourage, and the items she gifted the emperor see, *Theophanes Continuatus*, ed. I Bekker (Bonn, 1838), 318, 13-19: “ἦσαν δὲ καὶ γυναῖκες σκιάστριαι ἑκατόν, καὶ Σιδόνια ἔργα παμποίκιλα, ἃ δὴ νῦν παραφθαρέντος τυχόν τοῦ ὀνόματος τῇ τῶν πολλῶν ἀμαθίᾳ λέγεται σενδαῖς, ἑκατόν, λινόμαλοτάρια ἑκατόν (καλὸν γὰρ ἐπὶ τούτοις κοινολεκεῖν), ἀμάλια λινᾶ ψιλὰ διακόσια, καὶ ἕτερα ὑπερτάτου ἀραχνίου νήματα εἰς λεπτότητα, ὧν ἕκαστον εἰς καλάμου κόνδυλον ἐνεβέβλητο, καὶ αὐτὰ ἑκατόν, καὶ σκεύη πολυτελῆ ἐξ ἀργύρου καὶ χρυσοῦ ἱκανὰ καὶ διάφορα.” According to Demetrakos, one of the meanings of *skiasma* is a veil or a cloak; if the latter, possibly of the type that covered the head. Demetrakos, vol. 13, 6565. Trapp is uncertain whether to translate *skiastrai* as “embroiderer” or “umbrella-bearing.” Trapp, vol. 7, 1566. The author of the text thus lists “A hundred of various products of Sidon, which, having corrupted their [original] name, are now called ignorantly *sendal* by many, one hundred linen (perhaps a better translation would be “of wool and linen.” Trapp translates λινόμαλλον as linen cloth. See Trapp, vol. 5, 941) cloths, two hundred pure linen cloths, and cloths more delicate than spider’s web, of which there were a hundred, each of which was inserted into a reed tube, their number being one hundred as well; and many and diverse costly vessels of silver and gold.” The translation is from: I. Ševčenko, *Vita Basilii Imperatoris* (Berlin, 2011), 257. Ševčenko does not translate the word *skiastrai* but leaves it in italics. Jacoby interprets *skiastrai* as “female weavers” and argues that this text proves that the empire was producing a silk textile called *sendal* that resembled or imitated its namesake manufactured in the Muslim East. See, Jacoby, “Silk in Western Byzantium,” 458-

459. His interpretation is not certain. Alternatively, the reference (“σταυρία καὶ στεφάνια τὰ λεγόμενα σκιαστὰ”) in Reiske’s edition of *De Cerimoniis* may suggest that these women were simply bearing some kind of a ceremonial wreath. See, J.J. Reiske, *Constantini Porphyrogeniti imperatoris de cerimoniis aulae Byzantinae libri duo*, vol. 1 (Bonn, 1829), 573, line 19. The subject of the second text in question, Saint Nikon, lived in the tenth century. The Dumbarton Oaks database proposes that his *Life* was written between ca. 1050 and 1150 while the editor of the *Life* argues, convincingly, that it was written in the middle of the eleventh century. For the text of the *Life* of Saint Nikon (BHG 1366) see, the DO database (<http://www.doaks.org/saints2/dohp.asp?cmd=CitSearch&catsel=1>). (Accessed 6. 17. 2011). In the *Life* we read about the rivalry between John, a wealthy nobleman whose livelihood may have depended on his Jewish employees, and the saint who wanted to expel all the Jews out of Sparta: “Then on the pretext of some task, by which garments are accustomed to be finished, this bold-hearted and venturesome man [John] brought into the city one [a male] of these Jews (ἐπεὶ δὲ καὶ ἔργου προφάσει τινός δι’ οὗ εἰώθεν στιλβοῦσθαι τὰ ὑφάσματα, εἴσω τοῦ ἄστεως ἓνα [thus, a male] τῶν τούτων ἰουδαίων ὁ τολμητιάς ἐκεῖνος καὶ θρασυκάρδιος εἰσήγαγε).” Translation is by D. Sullivan, *The Life of Saint Nikon* (Brookline, 1987), 119-121. I also consulted J. Starr’s translation, which Sullivan seems to have followed in this paragraph. J. Starr, *The Jews in the Byzantine Empire 641-1204* (Athens, 1939), 167, n. 115. First, the fact that the Jew in question was a male is not insignificant. Weaving done in the household is ordinarily associated with women. Perhaps the involvement of males indicates the presence of commercial weaving of textiles. The presence of Jews in especially the dyeing industry is also known from an undated epitaph from Corinth: J. Starr, “The Epitaph of a Dyer in Corinth,” *Byzantinisch-Neugriechische Jahrbücher* 11 (1934-35), 42-49. In Starr’s and Sullivan’s translations “finished” does not deliver the full meaning of the sentence as the Greek reads, “δι’ οὗ εἰώθεν στιλβοῦσθαι τὰ ὑφάσματα.” I would propose that we paraphrase the above sentence as “through the process of which they [the Jews] were accustomed to make the cloths/garments shimmer...” It is also not clear what type of material is meant here. However, Jacoby claims, unconvincingly in my view, that the text refers simply to the “shearing of the surface [i.e. “smoothing or polishing”] of woolen cloth.” Jacoby, “Silk in Western Byzantium,” 455. I disagree, because there is no established connection between στιλβω and wool. In the eleventh century the word is used in relation to cloths/garments, as the reference to *pallia* in Symeon the Theologian (B. Krivochéine and J. Paramelle, *Syméon le Nouveau Théologien, Catéchèses*, vol. 3 (Paris, 1965), Oration 29, line 273) suggests. Again in the eleventh century it is used to refer to the reflection of colors (Psellos, A.R. Littlewood, *Michaelis Pselli oratoria minora* (Leipzig, 1985), Oration 28, line 81), metallic substances, pearl or marble. The usages of the verb στιλβω in relation to metal objects and the glitter that ensues from metallic substances seems to be a reflection of the Old Testament’s exclusive usage of the term in exactly that sense, according to Walter Bauer. W. Bauer’s *Lexicon*’s adaptation and translation by W. F. Arndt and F. W. Gingrich, *A Greek-English Lexicon of the New Testament* (Chicago, 1957), 776 defines the word as “shine, be radiant of garments,” tracing the word back to Homer. *LSJ* gives the meaning of the word as στιλβη, “lamp” or “mirror.” G. Friedrich, *Theologisches Wörterbuch zum Neuen Testament*, vol. 7 (Stuttgart, 1963), 665-666, conjectures that the word has Indo-European roots and it is possibly related to the verb “to see.” In the New Testament (Mark, 9, 3.), Jesus’ garments emit an intense white light: “τὰ ἱμάτια αὐτοῦ ἐγένετο στιλβόντα λευκὰ λίαν.” Overall, against Jacoby’s proposition, I believe that we are still in the dark about the type of garments woven in Sparta in the eleventh century; silk and wool cannot be definitively excluded or included. One should mention here the possibility that even though the earlier texts are few and less explicit than the twelfth century ones, pre-twelfth-century texts collectively point to a much older connection between the Peloponnese and some aspect of textile production. Significant in this regard is the presence of murex-fishers (a mollusk that produces the expensive purple dye) in the Peloponnese attested in the sources in the tenth century and previously. See, Jacoby, “Silk in Western Byzantium,” 481, and G. Moravcsik, ed., R. J. H. Jenkins, trans., *Constantine*

the case of Danelis, the text does not explicitly mention weavers but it states that Danelis herself gave *sendals*, among other finely woven linen garments, as gifts to Basil I. The *Life* of St. Nikon, on the other hand, definitely indicates that some aspect of textile production was done in Sparta but we do not know for sure if it involved silk weaving. Together, especially with the *Book of the Eparch's* statement that raw silk was smuggled outside the capital to elsewhere within the empire suggests that silks were woven outside the capital before the twelfth century. We do not have sufficient evidence to solve the details of this enigma yet.

The third reference, to Cyprus, comes from the Cairo Geniza and is dated to 1065 by a North-African merchant asking his trading partner, a Tunisian merchant in Fustat, whether to sell the Cypriot silk in his possession in Ramle or in Fustat to procure maximum profit.²⁶ The island remained in Byzantine hands for over two hundred years

Porphyrogenitus. De Administrando Imperio, 2nd ed. (Washington, D. C., 1967), ch. 52, lines 10-15 for another tenth-century source which Jacoby does not cite. The purples of Peloponnese are mentioned in Pliny; so murex in the Peloponnese has a much older history. The purple fishers in general (not of the Peloponnese) are mentioned in both the Theodosian and the Justinianic codes because this industry was under state monopoly. See, ed. R. J. H. Jenkins, *De Administrando Imperio. A Commentary* (Washington D. C., repr. 2012), 205. Before new evidence or new ways of interpreting old evidence are found, we will not have a better grasp on when and where raw silk/silk cloth production began outside the capital. For now, however, it would not be amiss to argue that the tenth-century reference to Danelis and the eleventh-century *Life* of Saint Nikon, collectively suggest a pre-twelfth-century connection between luxury textile production and the Peloponnese and perhaps also Cyprus.

²⁶ "When I arrived in Ramle, I had to pay customs to a degree I am unable to describe. The price in Ramle of the Cyprus silk, which I carry with me, is two dinars per little pound. I need not stress the urgency of a reply concerning the price of silk from Shâm and from Cyprus, and whether I should sell it here [in Ramle] or carry it with me." The Egyptian pound was about 0.5 kg. The standard price for an Egyptian pound of silk was two dinars. The author, then, hoped to gain more in Fustat and wanted to find that out

between 965 and 1191, and although there is seemingly very little explicit evidence for its silks before the thirteenth century, it is worth exploring this possibility further in the future.

The above-mentioned section six of the *Book of the Eparch* explicitly states that the raw silk brought to Constantinople was not to be sold elsewhere. We might deduce that this legislation was promulgated because there were other places within the Empire that made silk garments and needed raw silk.²⁷ One might still argue that if specific sites in the provinces were significant enough regarding raw silk production, processing of raw silk and/or silk weaving, the *Book of the Eparch* would have referred to them in the same way it does to the Syrian cloths, and Bulgarian linen,²⁸ linen from the Strymon region, the Black Sea and Kerasos.²⁹ It might be the case that these places were mentioned because all happen to be foreign territories. In this context, one cannot ignore the fact that when the *Book of the Eparch* employs the word “outside,” it usually

in the reply to this letter. See, Goitein, *Letters of Medieval Jewish Traders, Translated from the Arabic with Introductions and Notes* (Princeton, 1973), 47.

²⁷ Raw silk could have been imported into Byzantium from Norman Italy, according to Abulafia. See below Part 3, n. 34.

²⁸ *Eparchenbuch*, 9. 6.

²⁹ *Ibid.*, 9. 1.

does so to refer to areas “outside the city, but within the Empire,” and not to foreign countries outside the Empire.³⁰

Also significant in this regard is Oikonomides’ interpretation concerning the role the tax collectors/trade controllers (*kommerkiarioi*) may have played in silk production and/or silk trade. Oikonomides associates raw silk production with the *kommerkiarioi* and argues that after the loss of Syria and Palestine these officials were charged with the promotion and control of raw silk production in Byzantium.³¹ The Peloponnese could be an area where this activity took hold in time. As Oikonomides observes, however, it is difficult to disassociate the silk-related activities of the *kommerkiarioi* from other, non-silk-related, luxury products. In other words, there is no way of knowing for sure that the *kommerkiarioi* were trying to promote raw silk production everywhere they were

³⁰ Most of the instances where the *Book* employs the terms ἔξω [τῆς πόλεως], [ἀπὸ τῆς] ἔξωθεν and ἔξωτικός refer to areas outside the city but not necessarily outside the empire. The uses of the terms within the context of swine merchants (16. 2), fish merchants (17. 2), money exchangers (2. 6), candle and soap makers (11. 3 and 12. 6), butchers (16. 3), *bothroi* (cattle and horse inspectors, 21. 8) all together indicate that by “outside” the *Book of the Eparch* usually means “outside the city.” There are twenty six instances of the above terms in the *Book of Eparch*, and out of these about fourteen instances likely mean “outside the city” as they involve the trade of candle, soap, cattle, swine and sheep. There are twelve instances where these terms could refer either to “outside the city” or “outside the empire.” If we express all of these finds in percentages there is about seventy-seven percent likelihood that the above mentioned terms are used in the text to mean “outside the city but within the empire.”

³¹ See his seminal article, Oikonomides, “Silk Trade and Production in Byzantium from the Sixth to the Ninth Century: the Seals of Kommerkiarioi,” *Social and Economic Life in Byzantium* E. Zachariadou, ed., (repr. London, 2001), especially, 43-47 and 51. The maps showing the provinces and themes mentioned on *kommerkiarioi* seals from 730/31-755/56 are limited, interestingly, to southern Greece, western Turkey and Thrace. See, *ibid.*, 46-47. Except for Thrace, these places are, very roughly, the same areas that we know as silk manufacturers from the twelfth century on. For example, on the basis of a *kommerkiarios* seal from Andros dated A.D. 736-737, the connection between silk cloth (and possibly raw silk) production and Andros may go back at least four centuries (counting back from the twelfth century) if Oikonomides is right. See, *ibid.*, 46.

stationed. These officials could have been solely involved in raw silk and/or silk cloth trade, as opposed to its production and promotion, in addition to their other duties.

Overall, it is certain that in the tenth century, Constantinople was the major producer of luxury garments in silks and that raw silk was imported from the “outside.” Liudprand of Cremona’s (d. before 973) remarks on the tribulations he endured to take silk garments out of Constantinople, and the reference in the *Russian Primary Chronicle* are further evidence of the strict control the imperial officials placed not only on the production but also the sales and distribution of Constantinopolitan silk garments in the tenth century.³² However, as one can argue on the basis of the implicit uses of the term “outside the City” in the *Book of the Eparch* as well as the reference in Theophanes Continuatus, and later, in the mid-eleventh century, in the *Life of Saint Nikon*, that cloth production (luxury or not), silk cloth and raw silk production in the provinces—specifically in the Peloponnese but possibly also in Cyprus at the very least—can possibly be traced back to the tenth century at the very least. Perhaps new evidence, new ways of looking at old evidence, as well as scientific dating and provenancing of silks will further clarify this issue in the future.

³² Liudprandus Cremonensis, *Relatio de legatione Constantinopolitana*, Corpus Christianorum, Continuatio Mediaevalis, parag. 53-55 (<http://www.brepolis.net>, Accessed 2. 28. 2013); S. H. Cross, and O. P. Sherbowitz-Wetzor, *The Russian Primary Chronicle. Laurentian Text* (Cambridge, M. A., 1953), 75. Constantine VII warned his son about lending imperial silk robes to foreigners. See, G. Moravcsik, ed., R. J. H. Jenkins, trans., *Constantine Porphyrogenitus. De Administrando Imperio*, ch. 13, lines 24-43.

Thus, there are hints in the written record that some kind of work with high-value textiles was occurring in the Byzantine provinces even if the Constantinopolitan authorities tried to limit their access to the same resources as the producers in the capital. Perhaps silk-related work of some sort may have been occurring in the Peloponnese as early as the eighth century, and in the tenth or eleventh century, depending on the accuracy of our interpretation of the *kommerkiarioi* seals, Theophanes Continuatus and the *Life* of Saint Nikon. The best-known, explicitly-attested luxury production, however, was located in the capital at that time. The provinces only come to the fore as explicitly attested centers of production in the late eleventh, early twelfth century. The unambiguous evidence discussed below will show that significant provincial engagement in raw silk and luxury silk cloth production dates from the period under the Komnenoi in the twelfth century, even though the production of silks in the provinces, especially in the Peloponnese but possibly also in Cyprus, might have begun earlier.

Before the twelfth century, as later, the Byzantine emperor included money and gifts in silks in the commercial privileges granted to the Italians. As Laiou has keenly observed, however, by the twelfth century these gifts were left unmentioned, and their absence might mean that the more intense trade in these items had reduced their

prestige or rareness.³³ Part of the freer flow of international trade in the twelfth-century is the intensification of the north-Italian trade with Byzantium. This intensifying trade dates from the twelfth century when north Italian cities were not yet exporters of textile fabrics in general and certainly not yet exporters of luxury textiles.³⁴ Therefore, in the twelfth century, north Italy was mainly an importer of luxury silks from Byzantium, and not yet an exporter of these items. Luxury silk exports from north Italy intensify from the latter half of the thirteenth century and it is more likely that they reached

³³ Laiou, "Monopoly and Privileged Free Trade in the Eastern Mediterranean (8th-14th Centuries)," in D. Coulon, C. Otten-Froux, P. Pagès and D. Valérian, eds., *Chemins d'Outre-Mer. Études d'histoire sur la Méditerranée médiévale offertes à Michel Balard* (Paris, 2004), 516-517.

³⁴ Northern Italy was not yet an exporter of luxury textiles, i.e. fabrics. Southern Italy, certainly under the Normans in the twelfth century, was producing silk garments and fabrics. Hence, any textile-related exports from Italy to Byzantium before the latter half/end of the twelfth century would have to come from southern Italy. D. Abulafia, *Frederick II, a Medieval Emperor* (London, 1988), 17 suggested that perhaps around the 1050-1060s southern Italy was exporting raw silk into Byzantium. Also see, A. Guillou, *Le Brébion de la métropole byzantine de région (vers 1050)*, (Vatican City, 1974), contains many documents from Capiatbi at Vibo Valentia in Calabria that refer to mulberry trees. Pierre Toubert thinks that the origins of sericulture and silk cloth manufacture in Italy, especially in northern Italy, is due to a misunderstanding of terms (*siricum* and Chuma) and false generalizations based on the ninth-century polyptych of S. Giulia of Brescia. P. Toubert, "Un mythe historique: la sériculture italienne du haut Moyen Âge (IX^e-X^e siècles)," in H. Dubois, J.-C. Hocquet, A. Vauchez, eds., *Horizons marins, itinéraires spirituels (Ve-XVIIIe siècles): études* (Paris, 1987), 215-258. Henri Bresc, on the other hand, deems Toubert's argument valid but, as Toubert himself agrees, for northern Italy alone. Bresc thinks that raw silk production began in the north in the thirteenth century at the earliest. He argues, convincingly, drawing upon various sources including the Cairo Geniza, that Sicily and southern Italy have undisputable evidence showing that raw silk production began there by the 1020s. See, H. Bresc, "Mûrier et ver à soie en Italie (Xe-XV- siècles)" in ed. R. Durand, *L'Homme et l'animal domestique et environnement du Moyen Âge au XVIIIe siècle* (Nantes, 1993), 329-341. Also see Stillmann's Geniza-based study on Joseph b. Awkal's correspondence from the late tenth and early eleventh century, where Spanish and Sicilian silks (types not specified; so we do not know what kind of silks came from Spain and what kind(s) from Sicily) together formed twenty percent of his correspondence. N. A. Stillmann, "The Eleventh Century Merchant House of Ibn 'Awkal (A Geniza Study)," *JESHO* 16. 1 (1973), 73-84.

former Byzantine lands thereafter.³⁵ We will discuss this in further detail in the next chapter.

Contemporary Views on Byzantine Silk Textiles

Contemporary witnesses John Tzetzes and the satirical dialogue *Timarion* paint a lively picture of the international markets that flourished in the twelfth century in Constantinople and Thessalonike. According to their accounts the Byzantines not only imported luxury textiles from Muslim Spain, Syria, and Egypt, but also still exported textiles, including silk, to both the West and the East, in the twelfth century. Regarding the port in Thessalonike, he writes that “I saw all kinds [of merchandise], many spun and woven [clothes] for men and women, many from Boiotia and the Peloponnese...”³⁶

³⁵ In terms of textile production in Italy, I specifically mean Lucca, Genoa, and Venice; these were the cities where scholars think that the production of silk fabrics may have begun as early as the eleventh century. Jacoby, “Silk Economics and Cross-Cultural Artistic Interactions: Byzantium, the Muslim World, and the Christian West,” *DOP* 58 (2004), 228. This is not certain, however, as scholars continue to disagree on when and where silk production first begun in Italy. See Toubert article above in n. 22. In the thirteenth century only Venice, Genoa, Lucca and Bologna were producing silk fabrics. See L. Molà, *The Silk Industry of Renaissance Venice* (Baltimore, 2000), intro. xvii and 3; L. Monnas, *Merchants Princes and Painters. Silk Fabrics in Italian and Northern Paintings 1300-1550* (New Haven, 2008), 4-5.

³⁶ *Timarion*, 6. “Εἰ δὲ καὶ τὰ ἔνδον ζητεῖς, ὦ φιλοπράγμων ἑταῖρε ὡς ὕστερον κατιῶν ἐκ τῆς ἀκρωρείας ἐθεασάμην, παντοῖον εἶδος, ὅσα ἐν ὑφάσμασι καὶ νήμασιν ἀνδρῶν τε καὶ γυναικῶν καὶ ὅσα ἐκ Βοιωτίας καὶ Πελοποννήσου καὶ ὅσα ἐξ Ἰταλίας εἰς Ἑλλήνας ἐμπορικαὶ νῆες κομίζουσιν. ἀλλὰ καὶ Φοινίκη πολλὰ συνεισφέρει καὶ Αἴγυπτος, Ἰσπανία καὶ Ἡράκλειοι στήλαι ἰστοουργοῦσαι τῶν ἐπίπλων τὰ κάλλιστα. ἀλλὰ ταῦτα μὲν ἀμέσως ἐκ τῶν χωρῶν πρὸς τὴν πάλαι Μακεδονίαν καὶ Θεσσαλονίκην κομίζουσιν ἔμποροι. Εὐξείνιος δὲ πρὸς τὸ Βυζάντιον τὰ ἑαυτοῦ διαπρέπων ἐκείθεν καὶ οὗτος κοσμεῖ τὴν πανήγυριν, πολλῶν ἵππων πολλῶν ἡμιόνων ἀγόντων τὰ ἐκείθεν ἀγώγιμα.” The full translation of the passage is: “I saw all kinds [of merchandise], many spun and woven [clothes] for men and women, many from Boiotia and the Peloponnese and many that merchant ships carry from Italy to Greece. Phoenicia also brings in many and also Egypt; Spain and the Straits of Hercules weave the best altar cloths. Merchants export these items directly from their countries to old Macedonia and Thessalonike. The Black Sea sends its goods by way of Byzantium and it embellishes the fair as large

The *Timarion* makes clear that in the early twelfth-century, Peloponnese (Corinth), and Boiotia (Thebes), were already famous for their luxury cloths and garments in the empire, alongside foreign luxury-garment-producing sites that were exporting these commodities to Thessalonike. Although the *Timarion* does not specify the fabrics from Greece, they could include silk.

numbers of mules and horses convey the goods from there [Constantinople]. " My translation is slightly different than Barry Baldwin's. See B. Baldwin, *Timarion. Translated with Introduction and Commentary* (Detroit, 1984), 45. It is not completely clear if the first part of the paragraph is about clothes *per se* or merchandise in general. I think it is on both but the first two sentences focus unambiguously on luxury clothes. Spain, like Egypt, Syria, Peloponnese and Boiotia were almost certainly silk-cloth and perhaps of raw silk producers at this period. It seems more likely that "Italy" here refers to southern Italy whose textile production is well-known from the twelfth century on. On textile production in southern Italy see n. 34 above. According to May, the earliest dated silks from Spain were made during the reign of Abdurrahman II (851-852). In the twelfth century Malaga and Almeria in southern Spain were important sites for silk production. Idrisi writes (in 1154) that under Almoravid rule (so, shortly before he arrived at the town since Almoravid rule ended in 1147), Almeria was a town that manufactured all kinds of silk products, including those made "in the style of Isfahan and Jurjan [both located south of the Caspian Sea]" in eight hundred workshops. See, O. R. Constable with D. Zurro ed. and trans. *Medieval Iberia. Readings from Christian, Muslim and Jewish Sources* (Philadelphia, 2nd ed., 2012), 232. For the complete translation of Idrisi see, trans. P.A. Jaubert, *Géographie d'Édrisi*, 2 vols. (Paris, 1836). Spain was a significant silk cloth producer in the twelfth century. Spain also engaged in raw-silk production. Three merchant letters from the Geniza documents dated to 1119, 1138 and 1141 respectively, indicate Spain (especially Almeria) as the source of raw silk and silk garments that were sold in Egypt and Morocco. See, Goitein, *Letters of Medieval Jewish Traders* (Princeton, 1973), 245, 261, 265. Regarding raw silk, we know for example, that around mid-twelfth century, Alpujarras was a significant site engaged in sericulture. F. L. May, *Silk Textiles of Spain* (New York, 1957), 3, 10, 13. Most of the dated textiles cited in May's book are indeed from the twelfth century. May also mentions a source from the late-twelfth, early-thirteenth century which refers to the failed marriage between Manuel I's niece Eudokia and Alfonso II of Aragon (1162-1196). The author—a troubadour—Peire Vidal, was a fur merchant from Toulouse writing between 1192 and 1205. He traveled to the court of Alphonso II and might have joined the Fourth Crusade (perhaps with Boniface of Montferrat) as his latest poem dates from ca. 1205. In the poem in question, which May mentions (quoting W. Hecht, "Zur Geschichte der 'Kaiserin' von Montpellier, Eudoxia Komnena," *REB* 26 (1968), 161-169), the speaker says "And I will prefer from Castile/ A young lady alone/ To a thousand camels laden with gold/ From the Empire of Manuel" ("E plagram mais de Castela/ Una pauca jovensela/ Que d'aur cargat mil camel/ Ab l'emperi Manuel"). J. Anlade, *Les poésies de Peire Vidal* (Paris, 1913), 49. Also see, V. M. Fraser, *The Songs of Peire Vidal. Translation and Commentary* (New York, 2006), 195-200 for a slightly different translation than mine above. The knowledge about the failed embassy of 1174 and the perceived wealth of Manuel I's empire still at the end of the thirteenth century by a poet who spent a significant amount of time at the Spanish and the French courts are worthy of note.

A key issue is to determine the production sites of these luxury textiles that were produced in and exported from Byzantium to the East and West. As mentioned above, Constantinople may have remained an important production hub, yet during the twelfth century, Corinth and Thebes emerge in the sources as the champions of luxury silk textile production in Byzantium. For example, in addition to *Timarion*, Tzetzes, in his *Histories*, a miscellaneous historical collection of biblical, antiquarian and contemporary anecdotal information which the author thought an intellectual of his time should know,³⁷ mentions that the river Ismenos and Dirke (wife of the Theban king Lykos) gave “the glitter and the sparkle” to the soft/smooth clothes that are made in Thebes.³⁸ In another chapter Tzetzes, without explicitly specifying their material, puts the Theban cloths and/or garments on a par with the cloths and/or garments produced by the Chinese and the “Tocharians,” (people whom the twelfth-century Byzantine authors believed dwelled between the Oxus and the Jaxartes, which roughly corresponds to modern Uzbekistan), the producers of the most valuable cloths and garments in ancient times, adding and distinguishing that the Iberians of the West, that

³⁷ The *Histories* (*Chiliades*) include important anecdotes from Ancient Greek, Persian, Roman histories and Tzetzes’ contemporaneous anecdotal entries in thirteen books. It is based on ancient history but there are occasional references to contemporary realia the author saw fit to include. See, *Ioannis Tzetzae Historiae* ed. P. A. M. Leone (Galatina, 2007).

³⁸ Tzetzes, *Chiliades*, 10. 382-386. “Ο Ἰσμηνὸς ὁ ποταμὸς Θηβῶν τῶν ἑπταπύλων/ καὶ ἡ πηγὴ ἡ Δίρκη δε φύσει τῶν σφῶν/ ὑδάτων διαύγειαν καὶ στίλψιν δε καὶ γε πολὺ τὸ λεῖον/ δωροῦνται τοῖς ὑφάσμασι τοῖς ἐν Θηβῶν τῇ χώρᾳ/ τὸ τεχνικὸν αἱ χεῖρες δε τῶν εἰργασμένων ταῦτα.” Both the LSJ and Walter Bauer’s *Lexicon’s* adaptation and translation by W. F. Arndt and F.W. Gingrich, *A Greek-English Lexicon of the New Testament* (Chicago, 1957), 471 translate λεῖος as smooth, without embroidery.

is to say the Spanish, as well as the Caucasians manufactured the best woolen items of his time.³⁹ In 1147 Roger II of Sicily attacked Corinth and Thebes, taking captive the weavers there. The Byzantine historian Niketas Choniates mentions that according to the agreement of 1158 between William I of Sicily and Manuel I, only the aristocratic and military captives were released and “those whose lot it was to weave the finely woven linen cloths, and the beautiful and low-girdled women who had practiced this craft together with the men” were kept in Sicily.⁴⁰ In the same paragraph N. Choniates claims that the next generation of weavers from Corinth and Thebes followed their parents and migrated to Sicily. Niketas’ brother Michael, the metropolitan of Athens, in

³⁹ *Chiliades*, 11. 832-838 “Οἱ Σῆρες καὶ οἱ Τόχαροι, ἔθνη ἐγγὺς Ἰνδίας,/ ὑφάσματα τὰ κάλλιστα ὑφαίνοντες ἀπάντων, καὶ τὰ πολυτιμότερα τοῖς παλαιοῖς τῶν χρόνων,/ καὶ Ἰβηρες ἐσπέριοι καὶ Κοραξοὶ ὁμοίως,/ ὑφάσματα τὰ κάλλιστα εἰσὶν ἐριουργοῦντες./ Νῦν δὲ καταχρησάμενος ὡς οἱ πολλοὶ εἰρήκειν,/ τὸ ἐκ Θηβῶν, ἐκ Σηρικῶν, οὐκ ἀγνοῶν ὡς ἄλλοι.” The translation of the last two lines reads: “I incorrectly called the garment from Thebes a *vêtement chinois* as most people do, [but] did not do so out of ignorance as most do.” I would like to thank Saskia Dirkse and Roderick Saxey for their help with this passage. The Tocharians, the Chinese and the Phrynoi are grouped together under “the Scythian race” by the twelfth-century authors who, in turn, base their knowledge on Herodotus. Eusthathios of Thessalonike, for example, writes that according to Herodotus, the Persians called all the Scythian races “Sakai” (“Ἡρόδοτος δὲ λέγει ὅτι Πέρσαι πάντας τοὺς Σκύθας καλοῦσι Σάκας”) and Euthathios’ contemporary, Nikephoros Blemmydes writes that the “Sakai” who bear bows, and the Tocharians, the Phryroi and the barbarian Chinese, who wear various, valuable garments like the flowers of paradise in appearance, to which the work of spiders is no match, all dwell between the Oxus and the Jaxartes: “Μετὰ δὲ τὸν Ὠξον ἐπὶ ταῖς προχοαῖς τοῦ Ἰαξάρτου τοῦ ποταμοῦ οἰκοῦσιν οἱ Σάκαιοὶ φέροντες τόξα, καὶ οἱ Τόχαροι, καὶ οἱ Φρουροὶ, καὶ τὰ βάρβαρα ἔθνη τῶν Σηρῶν, οἵτινες φοροῦσιν ἱμάτια ποικίλα καὶ πολύτιμα ὅμοια τοῖς ἀνθεσι τῆς παραδείσου κατὰ τὴν χροιάν, οἷσπερ τὸ τῶν ἀραχνῶν ἔργον οὐκ ἐξισάζει.” For both references from Eusthathios and N. Blemmydes see, K. Müller, *Geographi Graeci minores*, vol. 2 (repr. Hildesheim, 1965), 345, 464 respectively. Blemmydes’ text which is based on the eleventh-century work of Symeon Seth may have been in fact a sixteenth-century forgery, according to Kai Brodersen, “Die geographischen schriften des ‘Nikephoros Blemmydes’,” in Ch. Schubert and K. Brodersen, eds., *Rom und der griechische Osten* (Stuttgart, 1995), 43-50, esp. 49. I would like to thank Prof. Angelov for the reference.

⁴⁰ *Historia*, 98. “καὶ τῶν γυναικῶν αἱ καλαὶ καὶ βαθύζωνοι καὶ τὴν αὐτὴν ἀνδράσι τέχνην ἐκμελετήσασαι.” The translation is from Magoulias, 57.

a famous passage where he complains about Constantinople consuming the best produce and products of the Empire, singles out “the Corinthian and Theban fingers” that weave the best clothes for the capital.⁴¹ In contrast with such wealthy neighbors, Athens, as its metropolitan writes shortly before 1204, was not amenable to agriculture or husbandry, nor was the city “a weaver of silken clothes;” rather, it was infested by pirate attacks and thus lost whatever prosperity it had had in the past as a trading port.⁴² Jacoby added the island of Andros to the list of provincial silk producers. Muthesius disagrees, in my view without sufficient justification, because of the clear references in the *Poem of the Cid* and Saewulf to silks (*sendals*) from Andros.⁴³ It is

⁴¹ M. Choniates, *Epistulae*, vol. 2, letter 50: “Οὐ Μακεδονίας καὶ Θράκης καὶ Θετταλίας πυροφόροι πεδιάδες ὑμῖν γεωργοῦνται, οὐχ ὑμῖν ληνοβατεῖται οἶνος ὁ Εὐβοεὺς καὶ Πτελεατικὸς καὶ Χῖος καὶ Ῥόδιος, οὐ τὰς ἀμπεχόνας ὑμῖν ἰστουργοῦσι Θηβαῖοι καὶ Κορίνθιοι δάκτυλοι, οὐ χρημάτων πάντες ὁμοῦ ποταμοὶ ὡς ἐς μίαν θάλασσαν τὴν βασιλῖδα πόλιν συρρέουσιν;”

⁴² M. Choniates, *Epistulae*, vol. 2, letter 60. “Οἶδεν ἡ πανσύνετος αὐθεντία σου ὡς ἡ καθ’ ἡμᾶς αὕτη χώρα τῶν Ἀθηνῶν οὐ κάρπιμός τις ἐστίν, οὐ ζωοτρόφος, οὐχ ἰστουργὸς ὑφασμάτων σηρικῶν, οὐκ ἄλλο οὐδὲν τῶν ἀνθρωπίνων ἀγαθῶν εὐμοιροῦσα, μόνοις δ’ ἐνευθηνεῖται θαλαττίοις λησταῖς, οὐ μόνον τὰ παράλια κακουργοῦσιν, ἀλλὰ καὶ πᾶσαν ἀκρώρειαν, ὡς καὶ τὴν θάλατταν αὐτὴν, ἐξ ἧς εὐετηρίαν τινὰ πρότερον εἶχον Ἀθῆναι, νῦν εἰς πανωλεθρίαν αὐτῶν περιέστασαι.”

⁴³ Jacoby, “Silk Crosses the Mediterranean,” in ed. G. Airaldi, *Le vie del Mediterraneo* (Genoa, 1997), 62 n. 51 and 63, n. 56; Jacoby, “The Production of Silk Textiles in Latin Greece,” in *idem.*, *Commercial Exchange across the Mediterranean XII* (repr. London, 2005), 22; Muthesius, *Byzantine Silk Weaving AD 400 to AD 1200* (Vienna, 1997), 115-116 with notes. For the *Poem of the Cid* see, R. Menéndez Pidal, *Cantar de mio Cid* (Madrid, 1956) v. 3, 967 (line 1971): “mantos e pieles [=pallia] e buenos çendales d’A[n]dria.” Also see A. Montaner’s recent edition: *Cantar de mio Cid* (Barcelona, 2011), 123 and n. 1971 (p. 902) accepts the reading of the word Adria in the original as Andria, hence, the Greek island of Andros. Montaner bases his acceptance of this reading on the authority of M. Beaulieu, *Le costume antique et médiéval* (Paris, 1971), 85, a work I have not yet been able to consult. I noted eleven references to silk textiles in the poem of the Cid and only in this particular instance is the provenance mentioned. Recent scholarship places the poem within the same literary milieu as *The Song of Roland*, and argues that even though the protagonist Sayyid Ruben Diaz lived in the mid-eleventh century, his legendary life was written during the latter half of the twelfth century, after having circulated orally for about a century. B. Raffel trans. *The Song of the Cid. A Dual-Language Edition with Parallel Text* (New York, 2009), intro. xi-xii. Jacoby’s evidence for Andros is too

important to underscore the fact that three independent sources specify that the silks from Andros were in fact *sendals* and samites. This might suggest that different areas or cities were specializing in different kinds of silk cloth or silk garment production. The evidence on Andros allows us to make this observation, but we cannot say the same for Thebes and Thessalonike for example.

Byzantine sources are not alone in pointing to the Middle Eastern empire's exports of luxury textiles to the West in the twelfth century. Western sources in the twelfth century are also alive to the prestige and glamour of Byzantine textiles. In the twelfth-century *chanson* of Girart de Roussillon, for example, the Byzantine court is consistently associated with riches such as silks, spices and perfumes.⁴⁴ In the twelfth-century Arthurian romance *Bel Inconnu*, Renaut de Bagé provides many descriptions of clothing imported from the East. In the romance, "Persia" is the most often stated eastern source but there are at least three mentions of silks (*diaspers*) which designate the textile with a Greek loan-word that may imply Byzantium as the other eastern

strong to ignore, especially in combination with Saewulf's reference to "precious *sendal*, samite and other fine textiles woven with silk" in Andros when he visited the island in 1102-3: "Postea venimus ad insulam quae dicitur Petalion, deinde ad Andriam, ubi fiunt preciosa scindalia et samitae et alia pallia serico contexta." *Peregrinatio*, R. B. C. Huygens, ed., (Brepols, 1994), l. 32. To add to what I think is an extraordinary (and therefore strong) sequence of evidence (comparable only to that of Thebes in the twelfth century): in 1135 a Genoese merchant's wife asked her husband to bring *sendal* and samites from Andros. Guglielmo Cassinese, *Notai Liguri del sec. XII* (Torino, 1938), vol. 2, 104, n. 275. Also see, Jacoby, "Silk in Western Byzantium," 462, and *idem*, "Silk in Mediaeval Andros," in E. Chrysos and E. Zachariadou, eds., *Captain and Scholar. Papers in Memory of D. Polemis* (Andros, 2009), 137, 139.

⁴⁴ Ed. and French trans. M. de Combarieu, G. and G. Gouiran, *La Chanson de Girart de Roussillon* (Paris, 1993), 55 and 57 lines 170 and 205: "pavillons de paille nue grezeis," and "lai viraz pailles nous per sous jacer."

source.⁴⁵ Another twelfth-century source, Chrétien de Troyes' *Erec et Enide*, is wonderfully explicit, for there we learn of "a noble *diasper* made in *Constantinoble*."⁴⁶ Two more obvious references to Byzantium and its silk have been identified in the twelfth-century French sources. In the novella *Fresne*, the mother wraps "her daughter in a beautiful and unique cloth: a piece of sumptuous silk brought back personally from Constantinople by the child's father."⁴⁷ When the Anglo-Norman poet Bérout retold the story of *Tristan and Isolde*, between ca. 1140-1170,⁴⁸ he mentioned a cloth (or a garment, depending on how one translates the term "drap") at King Arthur's court which was bought in Nicaea.⁴⁹ This is the only reference to Nicaea in relation to silk textiles in the

⁴⁵ M. Wright, *Weaving Narrative: Clothing Industry in Twelfth-Century French Romance* (University Park, P.A., 2009), 49, 83, 105, 113. In twelfth-century texts the term *diasper* could signal Byzantine origins for a silken cloth; in the thirteenth century and thereafter the possibility was reduced. Regarding the twelfth century texts that mention *diaspers* one would have to analyze whether these sources treat *diasper* as a Byzantine cloth or cloth in general that could be woven in all the known textile centers of that century. Another author noted the desire for the new and the exotic in twelfth century French literature, especially in the literature, such as *The Song of Roland*, that belong to the Crusader Cycle. See, S. G. Heller, "Fashion in French Crusade Literature: Desiring Infidel Textiles," in D. G. Koslin and J. Snyder, eds., *Encountering Medieval Textiles, Object, Texts, Images* (New York, 2002), especially, 103, 112-113.

⁴⁶ "S'ot cote d'un diapre noble/qui fu fez au Constantinoble...une couste de paile/qui veune estoit de Tessalie," Jacoby, "Silk Crosses the Mediterranean," 63, n. 55; Wright, 83-84.

⁴⁷ Wright, 87.

⁴⁸ J. Choceyras, *Réalité et imaginaire dans le Tristan de Bérout* (Paris, 2010), 129.

⁴⁹ The manuscript of Bérout's text is very corrupt according to Prof. Wright. The text reads: "Un drap de soie a paile bis/ Devant le tref au roi fu mis/ Ovrez fu en bestes, menus; / Sor l'erbe vert fu estenduz. / Li dras fu acheté en Niques/En Cornouaille n'ot reliques/En tresor ne en filatieres." Translation: "A dark grey silk carpet [A silk garment of grey cloth] /Was hung in front of the king's pavilion/It was finely adorned with animal figures/ Stretched over the green grass/ The cloth [garment] was bought in Nicaea." For both see G. R. Mermier, *Bérout. Tristan and Yseut Old French Text with Facing English Translation* (New York, 1987), 208-209. The alternative translation in the brackets is mine. Because it was hung in front of the King's pavilion it makes sense to translate the term as carpet, however, that limits the more probable translation of cloth. According to the on-line F. Godefroy, *Dictionnaire de l'ancienne langue française* 10 vols.

twelfth century. Yet, it is striking that the city is mentioned as a point of sale, in contrast with the contemporary Byzantine sources which consistently attribute silk production to Thebes (and regionally to the Peloponnese and Boiotia) primarily. Nicaea was recaptured in 1097 by the Crusaders after twenty years of Turkish rule and the association of the valiant legendary king with that city may have been intentional. If it was not intentional on the part of the author, one could argue that as a member the western elite he was more concerned with where the item was bought rather than where it was actually made. In other words, writing in the middle of the twelfth century, Bérout connected the Byzantine city which the Crusaders captured from the Turks in recent memory, with the legendary king via this Byzantine silk. Bérout's association of silk with Byzantium, whatever the exact details, is nevertheless very significant. One cannot ignore the reference to Thebes in Benjamin of Tudela and to the silk producers of that city: "Thence [after Lepanto and Crissa] it is two days' journey to the great city of Thebes, where there are about 2,000 Jews. They are the best craftsmen in the land of the Greeks at making silk and purple garments/cloths."⁵⁰ Benjamin also names

(Paris, 1881-1902) "paile" is a "riche drap d'or ou de soie rayée, qui venait d'Alexandrie en Egypte; tenture, tapisserie." We do not know if Nicaea was a commercial center in the twelfth century that was large enough to serve as a hub for eastern silks as the nearby city of Prusa (modern Bursa) would under the Ottomans in the fifteenth century.

⁵⁰ It is not clear in the original whether silk cloth or silk garment producers are actually meant in the text. Adler in *The Itinerary of Benjamin of Tudela*, ed. trans. and commentary by M. N. Adler (London, 1907), 17 and Asher both translate "bigde" as "cloth." "These are most eminent manufacturers of silk and purple cloth in all Greece." See, *The Itinerary of Rabbi Benjamin of Tudela*, trans. and ed A. Asher (London and Berlin, 1840), 47 (original is on p. 16). Adler's translation reads, "They are the most skilled artificers in silk and purple cloth throughout Greece." "Bigde meshi (silk) ve (and)-'argaman (silver)" is a rough

Thessalonike and Constantinople as other silk producing sites of his time which he encountered in the Byzantine Empire.⁵¹

To summarize, there may have existed an older thread that connected the Byzantine textile industry to southern Greece, the Peloponnese in particular, even though Thessalonike in northern Greece is also mentioned once by Benjamin of Tudela. The first written sources that possibly mention the presence of textile-production-related activities in the Peloponnese (specifically, Sparta) come from the tenth (*Life of Basil I*) and the middle of the eleventh centuries (in the *Life of St. Nikon*), even though there may have been a much earlier connection, as Oikonomides' work on the *kommerkiarioi* seals suggests. The explicit references in the Byzantine and western sources⁵² to especially the high-end textiles from the Peloponnese (Corinth, Andros off

transliteration of the Hebrew; "bigde" is garments/clothes/cloths of (i.e. in genitive plural). I used Jacoby's translation in the second sentence of the quotation above but it is not possible to argue, as he does, solely on the basis of this text, that the Theban Jews were making silk garments (not cloths) and therefore they must have been tailors and not silk cloth manufacturers. See, Jacoby, "Jews and the Silk Industry of Constantinople," repr. in *Byzantium, Latin Romania and the Mediterranean XI* (Aldershot, 2001), 8. I would like to thank Peter Machinist, Professor of Hebrew, for his transliteration of the text. According to Prof. Machinist "bigde" may be translated both as "garments of" and "cloths of." Perhaps an expert on medieval Hebrew can resolve the ambiguity after studying the usage of the word in Benjamin's *Travels*, and if necessary, also in the works of his contemporaries.

⁵¹ *Ibid*, 19, 23. In the case of both Constantinople (p. 19) and Thessalonike it is clear that the Jews were involved in silk production: regarding the former, Benjamin writes that "amongst them [the Jews] there are artificers in silk and many rich merchants," while "the Jews [in Thessalonike] are oppressed, and live by silk-weaving."

⁵² The Cairo Geniza is proof that luxury textiles from Byzantium were imported to Egypt in 1155 but it does not tell us where in Byzantium these textiles were produced. The Jewish consumers of Cairo were concerned only with the country they were bought in, and not with where they were produced in that country.

its coast), Boiotia (Thebes), and Thessalonike, in addition to Byzantium's time-honored textile production center at Constantinople that certainly had a longer history and fame in silk textiles, all date from the late eleventh and early twelfth century. Among these references, Thebes, Andros, Thessalonike, and Constantinople are mentioned specifically in relation to silk cloth production; Corinth in relation to fine linen. Regarding silks, there may have been even further specialization of labor already in place by the early twelfth century, as Andros seems to have been exclusively producing *sendals* and samites then. Constantinople is mentioned as a source of *diaspers*, although, regarding Thebes, we do not know what type of silk cloth was produced in that city. There is overall little doubt that a significant portion of the Byzantine high-end textiles exported at least to the West in the twelfth century were woven in these cities in southern Greece in addition to those woven in the capital and in Thessalonike. Whether they were already producing high-end textiles or raw silk before the late eleventh and the early twelfth century, we cannot say, but it seems that the Peloponnese in particular was involved in some aspect of high-end textile production at least as early as the tenth century, to judge by the references in the *Book of the Eparch* and Theophanes Continuatus. The fact that both the Byzantine and non-Byzantine sources refer specifically to Thebes, Andros and Thessalonike explicitly from the early twelfth century on, suggests that even if production of silks had begun there earlier, the rise of these sites to internationally recognized status seems to have taken place sometime

between the late eleventh and the early twelfth century. It seems that around then these cities were complementing Constantinople as important silk-cloth producers.

CHAPTER 9

Changing Trends in Luxury Textile Exports from Byzantium ca. 1100-1400.

In this chapter we will be analyzing the evidence from Western museum catalogues and discuss their evidence in light of the references preserved in the surviving inventories and testaments from the West. Because both the catalogues and the inventories are of Western origin, this chapter rests entirely on the surviving textiles in Western museums and mentions of Byzantine textiles in Western sources. Appendix 2 provides a handy list of the Western inventories and testaments used in this chapter. Overall, my purpose in making an assessment of the available textiles thought to be of Byzantine origin is to assess when these textiles identified as Byzantine by textile historians were produced; while our purpose in collecting the available written data on Byzantine textiles in Western documents is to see whether or not the production period suggested by the documents themselves squares in with the evidence from museum collections. But before we begin our discussion, it would be helpful to briefly explain a term that we encounter in the inventories and testaments very often: Romania.

As we will see below many of the surviving inventories from the end of the thirteenth century mention garments or raw materials from or made in Romania. Unfortunately, for present purposes, Romania, as it happens, is a capacious, fluid term. For its definition and how it was deployed by Westerners, the best document to turn to

is the *Partitio Romaniae*.⁵³ The author(s) of this document describe Romania as a land the bulk of which lies to the east and west of the Aegean Sea. Its northern limits, according to the *Partitio*, are in Tirana (in Albania), Prilep (in the Republic of Macedonia), and Agathopolis (modern Ahtopol) in Bulgaria on the Black Sea coast. Greece and western coast of Turkey, up to the banks of the Sangarios River (modern Sakarya River) in the north east, constitute the essential core of Romania. On the Black Sea coast three cities, Sinope, Paurai (modern Bafra), and Oinaion (modern Ünye) are also included in the *Partitio*.⁵⁴ These three Black Sea cities, listed as part of Romania, were incorporated first into the state of Trebizond and in 1214 fell to the Turks. Other cities and regions—the areas annexed by the states of Epiros and Nicaea for example—were also incorporated into other polities. Essentially, mainland Greece, the western littoral of Turkey, southern half of Albania, the Republic of Macedonia, and the southern tip of Bulgaria constitute Romania par excellence. In this regard, eastern Turkey, Cyprus and the Black Sea remain outside of it. In the inventories, for example, Cyprus is always listed separately.⁵⁵ In this chapter, then, we will discuss in detail the when and how this term was used in the inventories. But before we delve into the textual evidence on textiles from Romania, we will study the museum catalogs which currently preserve the actual

⁵³ Carile, “Partitio,” 125-305.

⁵⁴ *Ibid.*, 217, 237-238. The maps between 160-161 are useful.

⁵⁵ For example: Molinier, 84, 89-91, 131; Münz and Frothingham, 11-12. These inventories and their contents will be discussed in detail below.

remains of Byzantine textiles. How textiles are dated, scientific advances in dating, provenancing also form sections of this chapter.

What do the Silks themselves Say? The Origins and Dates of Silks Preserved in Western Museums vs. the Inventories

The surviving silks themselves testify to the importance of the Byzantine silken cloth supply for the West. They have been helpfully catalogued by Anna Muthesius.⁵⁶ She inventoried all possible Byzantine silk items from the fourth century to the end of the twelfth century that she could locate in existing western church treasuries and museum collections. Her catalogue ends in 1200. Out of 120 dated silks with assigned provenances,⁵⁷ Muthesius identifies sixty-five (approximately fifty-five percent) of these textiles as Byzantine, twenty-two (eighteen percent) as Eastern Mediterranean, twenty-one (seventeen percent) Islamic, and eight (6.5 percent) Central Asian origin, while the remaining four silks (three percent) hail from Sicily. Judging from Muthesius' identifications of the surviving silks, Norman Sicily is the earliest western-governed area for silks, while its products date after the second half of the twelfth century. Muthesius includes three possible Sicilian textiles in her first catalogue from the twelfth century. Regardless of exactly how many of the silks grouped under "Eastern

⁵⁶ Muthesius, 1997. The catalogues I refer to above are entitled Appendix 3 and 4 respectively in the book.

⁵⁷ By provenances I mean the places of production that Muthesius assigned to the textiles she inventoried. Muthesius's second catalogue, in addition to the sixty-five silks of Byzantine attribution, lists an additional 1,267 instances of silk holdings in western church treasuries and museums of probable, yet less certain and of undated Byzantine origin, again up to A.D. 1200.

Mediterranean” were actually Byzantine (as opposed to products of other middle eastern centers), Muthesius’s analysis of design and weaving techniques shows the same lesson as that of the written records: the significant role of the Byzantine Empire in supplying the silk clothes to Europe up to about 1200 is unmistakable.⁵⁸

Even more interesting is the chronological distribution of Muthesius’s datings of the silks. The bulk of the Byzantine silks in the catalogue (forty out of sixty-five, i.e., approximately sixty-two percent) are assigned to the tenth and eleventh centuries. Byzantine silks from the eighth and ninth centuries currently in European church treasuries, European and North American museums, on the other hand, constitute a not negligible thirty percent (19/65) of the total. It is significant in this regard that only one Byzantine sample, according to Muthesius, dates from the eleventh and/or twelfth century; the remaining Byzantine silks (5/65, eight percent) are all earlier, from the sixth to the eighth centuries.⁵⁹ This runs counter to the argument made earlier in this chapter. Since during the late eleventh and twelfth centuries, in addition to Constantinople, there were at least three more sites in Greece producing valuable silk cloths in the Empire, it is plausible that the Byzantine Empire’s aggregate production of silk

⁵⁸ Muthesius does not claim that there is no written evidence on post-1200 Byzantine textiles or that textile production ceased after 1200. She leaves the task of analyzing that evidence to David Jacoby in a more recent article. “Textiles and Dress in Byzantium,” M. Grünbart, E. Kislinger, A. Muthesius and D. Stathakopoulos, eds., *Material Culture and Well-Being in Byzantium (400-1453)* (Vienna, 2007), 163-164.

⁵⁹ England, for example, turned to Spanish silks early on and it is argued that Byzantine silk imports to the island ended well before 1204. See, E. Crawford, F. Pritchard and K. Staniland, eds., *Textiles and Clothing c. 1150-c. 1450* (Suffolk, 2001), 86.

increased in these years, not decreased, as Muthesius' classification suggests. In addition, behind the explicit mentions of these cities in the twelfth-century sources, both Byzantine and western, likely lies an increased frequency of international trade that involved twelfth-century Byzantine silks. In other words, one expects to see an increase of twelfth-century Byzantine silks in western holdings, not a decrease *vis à vis* the previous centuries. Thus, viewed from the perspective of the written evidence, the chronological distribution of datings in Muthesius' valuable monograph seems perplexing.

Muthesius dates the bulk of the Islamic silks, on the other hand, to the tenth or eleventh (13/21, i.e. sixty-one percent) or the twelfth century (eight, i.e. thirty-eight percent).⁶⁰ Although the absolute numbers are small, the proportions as identified by Muthesius seem to indicate that, overall, the Islamic competition with the Byzantine silks was already increasing in the tenth and eleventh centuries and that in the twelfth century most of the silks imported (imported via trade or as gifts) into Europe were from the Muslim east or Muslim Spain. In the twelfth century, Sicily also emerged as a new competitor.

⁶⁰ Muthesius writes that the Byzantine and the Islamic silks from the tenth and eleventh centuries are hardest to distinguish. Muthesius, "Silk in the Medieval World," in D. Jenkins, ed., *The Cambridge History of Western Textiles* (Cambridge, 2003), 327-328.

That Muthesius does not identify any Byzantine silks from the last two and a half centuries of the Empire suggests that silk and silk clothes were no longer produced in the Empire or, better put, were not exported (as commodities or gifts) to western Europe, the region which supplied most of her examples. This does not square exactly with the written sources from within Byzantium. At the very least, these sources suggest that raw silk was still grown and silk clothes were still being manufactured in the Nicaean state and possibly in the state of Epiros. Before analyzing the Byzantine written records from the thirteenth century, however, I would like to consider the textile collections of European museums that hold Byzantine textiles. What interests us most are the geographic distribution of provenances of silk textiles circulating in the late medieval and early modern Mediterranean, with primary focus on the thirteenth and the early fourteenth centuries. This analysis will effectively situate Byzantine silk production within the thirteenth-century context. With these goals in mind, I will first make a brief analysis of the evidence we can glean from the surviving silk garments from the European museums with Byzantine textile holdings. In the second part of this analysis I will study the silk vestments mentioned in the surviving church inventories from Europe (mainly France, England and Italy). These contemporary records, which were concerned with documenting the nature and quality of the precious possessions of leading European shrines, sometimes mention the origins of the valuables they inventoried. Because they came from contemporaries charged with caring for precious

items of wealth, they merit special attention when they specify the nature (and, implicitly, the value) of the objects they recorded. By looking at the provenances that the contemporary cataloguers attributed to these vestments we can see if there are any overlaps between the identifications of modern museum staffs, textile historians, and other scholars with expertise in the study of historical textiles, and the contemporary scribes who wrote down the amount, type, description and sometimes the provenances of inventoried items. I believe that the results will prove quite telling.

Much like Muthesius's catalogues, Brigitta Schmedding's study of the historical textiles from churches and monasteries in Switzerland finds that the Byzantine textiles all predate the thirteenth century.⁶¹ Not unlike Muthesius's catalogues, the datings are all founded on comparisons with textiles that bear inscriptions that directly indicate or allow dating, as well as on motifs that are clearly identifiable as belonging to a specific region. Ten relic sacks from the cathedral of Bern in Switzerland range in date from the ninth to the "eleventh-twelfth" centuries. All of these textiles, of which nine are samites and one a *lampas* (a patterned textile where the pattern is added to the ground fabric by binding warps), are assigned a Byzantine provenance.⁶² Six silk relic sacks and a pair of Byzantine *lampas* buskins are dated unambiguously to the twelfth century. Of these twelfth-century relic sacks, three are reckoned Spanish, one samite relic sac as Egyptian,

⁶¹ B. Schmedding, *Mittelalterliche Textilien in Kirchen und Klöstern der Schweiz, Katalog* (Bern, 1978).

⁶² *Ibid.*, nos. 11-15, 17, 18, 20, 21.

and the remaining two samite sacks are assigned to Syria or Byzantium.⁶³ Post-twelfth century silks are identified as Spanish, Central or East Asian, Persian, Egyptian, or Italian, but never Byzantine. Most of the thirteenth-century silks are attributed to Spain (12/15) with only one thirteenth-century attribution each to “Central or East Asia,” Egypt and Italy.⁶⁴ Once again, there are no thirteenth- or post-thirteenth-century attributions to Byzantium. Fourteenth-century silks are attributed in equal proportions to Italy (6/14) and Spain (7/14) while one is identified, on the basis of *comparanda*, as coming from Turkestan. The fifteenth-century silks are almost exclusively from Italy—mostly from Lucca. These proportions to a large extent recur among the remaining historical silken textile holdings of other museums featuring Byzantine items.

The Swiss collection is exceptional only in that, unlike the other catalogues I studied, it does not hold any items attributed to twelfth-century Sicily; also, the proportions of silk items thought to be of Central or East Asian origin are higher in the other collections.⁶⁵ Generally, in the collections the earliest textiles (from the sixth

⁶³ *Ibid.*, nos. 25, 94, 153, 239, 240, 243, 245.

⁶⁴ *Ibid.*, no. 22 from the Bero Cathedral.

⁶⁵ **Netherlands:** A. Stauffer, *Die Mittelalterlichen Textilien von St. Servatius in Maastricht* (Bern, 1991) has one instance of a so-called “Tatar cloth” from the thirteenth or fourteenth century (p. 65) and four items from China or Turkestan dating to the same period (pp. 182-184). **Germany:** One interesting observation without much explanation by way of the criteria used is Otto IV’s mantle which the textile historian von Wilckens thinks was made with twelfth-century Byzantine silk and embroidered in England around 1200. Although it is important to note that the silk, silk cloth and the embroidery on a finished garment can in theory all issue from different localities the author gives no explanation as to her reasoning. L. von Wilckens, *Die Mittelalterlichen Textilien. Katalog der Sammlung (von Herzog Anton Ulrich-Museum Braunschweig)* (Brunswick, 1994), 13-15. The post- twelfth-century items in this museum which holds 84

century on) are from Egypt, and rarely from Iran and Iraq. Byzantine textiles appear in the period from the eighth to the eleventh and twelfth centuries when the presence of the Spanish textiles becomes more pronounced. The thirteenth century is more of a mixed bag with Italian, Tatar, Syrian and Egyptian textiles while post-thirteenth century textiles are most often Italian with occasional references to Syrian, Egyptian and Spanish textiles. Egyptian textiles are visible almost consistently from the beginning of the seventh century to the end of the fifteenth. But surprisingly, China, the birthplace of silk, the place that gave silk its name, is rarely, if ever, mentioned.

If we sum up, then, according to the evidence from museum holdings, attributions by many different scholars of textiles in many different collections indicate Byzantine textiles in good numbers did wind up in western Europe, and have been preserved there since then. But textiles identified by modern scholars as coming from Byzantium disappear after ca. 1200. Thirteenth-century silks are predominantly Spanish, but Central/Eastern Asian, Italian, Egyptian and Sicilian silks are also identified; Spain and Italy proportionally dominate the fourteenth century even though there are some Egyptian and Central/East Asian textiles still during that period. By the

catalogued silk textiles are from Spain, Mamluk Egypt and Italy. Two of the five Turkish silks are, according to the author, from Bursa. *Ibid.*, 121-123. **France:** For the collection of the Cluny Museum see, S. Desrosiers, ed., in coll. with G. Cornu, V. Huchard, F. Valantin, T. Bouzid, *Soieries et autres textiles de l'Antiquité au XIVe siècle* (Paris, 2004); Sicilian and Asian references are from pp. 155ff and 310ff respectively; J.-P. Laporte, *Le Trésor des saints de Chelles* (Chelles, 1988); **Italy:** W. F. Volbach, *I Tessuti del Museo Sacro Vaticano* (Vatican City, 1942), esp. 46-48, 59; For Milan see, M. Martiniani Reber, "Stoffe tardoantiche e medioevali nel Tesoro di Sant' Ambrogio," in C. Berteli, ed., *Milano, una capitale da Ambrogio ai Carolingi* (Milan, 1987), 188 contains the only Sicilian piece from the twelfth century.

fifteenth century, attributions point almost solely to Italy, especially to Lucca and Florence.⁶⁶

Textile historians and museum staff focus their attention on the technical aspects of an item such as the weaving techniques and the motifs applied; the identifications are always made on *comparanda* which render the datings, as well as the attributions, approximate. For the period between the seventh and the eleventh-twelfth centuries textile historians seem to have the most difficulty in distinguishing between the Middle Eastern and Byzantine textiles.⁶⁷ But sometimes similar difficulties complicate distinguishing between Byzantine and Spanish textiles too. Thus, there is a significant cloud of doubt surrounding provenancing of these textiles. The art and science of attributing provenance based on *comparanda* becomes especially difficult and complicated during and following the thirteenth century when “cross-pollination” of motifs and weaving techniques render the end-products even less distinguishable as a

⁶⁶ I find the link between the museum holdings and the actual development of the “textile industry” at a given place during a given period quite informative. For example, the observation that a large proportion of the museum holdings from the fifteenth-century-Italy are in fact from Florence reflects to some degree what we know about the Florentine textile production at the time: Florence had many specialized guilds in the fifteenth century (not just a shoemakers’ guild but also slipper-makers guild and clog-makers’ guild, for instance); Herlihy and Klapisch-Zuber counted 866 clothiers in Florence in 1427. We also learn that the upper echelons of the Florentine society started having costume parties by the end of the fourteenth century. See, C. C. Frick, *Dressing Renaissance Florence; Families, Fortunes, and Fine Clothing* (Baltimore, 2002), 34, 55, 106.

⁶⁷ For example, *lampas*, patterned silks in which patterns are added by additional warps and wefts, introduced in Syria in the eleventh century were also made in Constantinople during the same century. Bagdadi silks were produced in Spain, as early as the tenth century. J. Beckwith, “Byzantine Tissues,” in *Actes du XIVe congrès international des études byzantines* (Bucarest, 1971), vol. 1, 351, 353.

result of the intensification of international trade and the emergence of new weaving centers in northern Italy in addition to the previous centers.⁶⁸ Dorothy Shepherd, for example, argues that motifs such as the double-headed eagle, birds of prey, hunting scenes, and the griffin figure were motifs the Almoravids admired much like the Byzantines, and so by the thirteenth century, the double-headed eagle no longer served as a marker distinguishing Byzantine textiles from “the rest.”⁶⁹ Furthermore, she argues for a Spanish origin for the third silk dalmatic from the tomb of St. Bernardo Calvo (d. 1243) in Vich in Catalonia, which had been attributed to Byzantium before her article.

⁶⁸ For example, a systematic analysis of contemporary Italian paintings demonstrated a truthful reproduction of the designs used between the thirteenth and the fifteenth centuries which prove contact with the motifs, geometrical patterns and arabesques found in Chinese, Persian and Spanish textiles. B. Klesse, *Seidenstoffe in der Italienischen Malerei des 14. Jahrhunderts* (Bern, 1967), 60-122ff. The same author found a close relationship between Spanish textiles and the Spanish influence in the motifs and designs used in Giotto's paintings (1266-1337). *Ibid.*, 25ff. A similar work on Simone Martini's (c. 1284- 1344) altarpiece drawing made in 1317 representing Robert of Anjou in the “highest fashion of the time,” i.e. the Tartar silks. Monnas argues that the details in the painting demonstrate the artist's close inspection of real textiles and his experience of actual silken clothing available in the Regno. L. Monnas, “Dress and Textiles in the St Louis Altarpiece: a New Light on Simone Martini's Working Practice,” *Apollo* 373 (1993), 167-174. Wardwell observes that the mixing of eclectic forms continues in an intensified fashion in the fourteenth and fifteenth centuries: A. Wardwell, “The Stylistic Development of 14th and 15th Century Italian Silk Design,” *Aachener Kunstblätter* 47 (1976-77), 203.

⁶⁹ D. Shepherd, “The Hispano-Islamic Textiles in the Cooper Union Collection,” *The Chronicle of the Museum of the Arts of decoration of the Cooper Union* vol. 1, 10 (December, 1943), 363. Muthesius argues that the Byzantine influence extended not only to the West but also the East. The “toothed” medallions which she deems a characteristic of Central Asian silks helps her distinguish the Byzantine motifs employed in Central/East Asian silks as these motifs can easily be distinguished from their Byzantine counterparts by their use of that medallion style. See Muthesius, “Byzantine Influences Along the Silk Route: Central Asian Silks Transformed,” in *Contact, Crossover, Continuity. Proceedings of the Fourth Biennial Symposium of the Textile Society of America, Inc.* (Los Angeles, 1995), 183.

She argues, on the contrary, that the dalmatic was based on Byzantine models but produced in Spain, an argument which Muthesius also accepts.⁷⁰

Hence, there seem to be important limitations and ambiguities to attributing provenance based on weaving techniques and *comparanda*, and given the scarcity of archaeological textiles that are dated explicitly, one needs to view its premises and conclusions with caution.⁷¹ This is not to undermine the value of technical analyses of the textiles; the proportions of warps to wefts may in certain cases be a good pointer for both provenance and dating.⁷² Wardwell, for example, thinks that the grape vine leaf is a good marker for Italian silk textiles in the fourteenth century. Based on an analysis of the use of imagery on silk clothes she notes a significant difference between fourteenth-century Italian textiles (which she finds more imaginative, orientalizing and eclectic) and fifteenth-century Italian textiles.⁷³ Wardwell also underscores the possibility of

⁷⁰ Shepherd, "Hispano-Islamic Textiles," 364; *eadem.*, "The Third Silk from the Tomb of Saint Bernard Calvo," *The Bulletin of the Cleveland Museum of Art*, Vol. 39. 1 (Jan., 1952), 13-14; N. Stratford, P. Tudor-Craig and A. Muthesius, "Archbishop Hubert Walter's Tomb and its Furnishings," in *Medieval Art and Architecture at Canterbury before 1220* (Leeds, 1982), 83.

⁷¹ M. Martiniani-Reber, ed. *Parure d'une princesse byzantine - tissus archéologiques de Sainte-Sophie de Mistra* (Genève, 2000), is the only archaeological textile study that I am aware of concerning the later Byzantine period.

⁷² L. von Wilckens argues that 1:3 twill weave (the warp goes over and under three wefts) was often used in Spain around 1100 A.D. Cufic inscriptions and spiral oak leaves on the frames, a common feature of Spanish textiles of the period, helped with her dating and identification. See her "Some Remarks on Spanish Samites from the 12th and 13th Centuries," *CIETA* 70 (1992), 87-90.

⁷³ Wardwell, "The Stylistic Development of 14th and 15th Century Italian Silk Design," 203-206.

detecting regional differences based on how the selvages were woven.⁷⁴ Silks woven with gilded threads, or orfreys, (“cum aurifrigio” in inventories)—for which, according to Marta Jaro, the earliest textual evidence from Europe dates from the twelfth century (*De Diversis Artibus* of Theophilus Presbyter)—also contain useful information for these large-scale regional differences:⁷⁵ both Jaro and Wardwell note variances across regions in terms of the materials and methods used in gilding. For instance, linen is the usual substrate of the gold and silver core in threads in non-Spanish-Europe; silk occurs there only occasionally. Spanish weavers, on the other hand, preferred silk as the substrate of their metallic threads. In the Middle East, cotton, silk and linen were all used equally in this capacity.⁷⁶ According to Jaro, Italian and German workshops exclusively used more distinctive materials: membrane threads of silver gilt animal gut wound around a linen core.⁷⁷

⁷⁴ The edges of Italian drawloom silks are from linen cords like those of Spanish silks which occasionally are made of silk. She notes that in the Middle East linen bonds were rarely used; they turned usually to silk when making the selvages. Another regional difference between (Middle) Eastern and Western (Italian) selvages is that while the former is off center to its vertical axis, the latter are follow along the axis. See, Wardwell, “Panni Tartarici: Eastern Islamic Silks Woven with Gold and Silver (13th and 14th centuries),” *Islamic Art* 3 (1988-89), 96.

⁷⁵ M. Jaro, “Gold Embroidery and Fabrics in Europe XI-XIV Centuries,” *Gold Bulletin* 23.2 (1990), 51. She argues for an Eastern (possibly Byzantine, Western Asian or North African!) origin for the gilding technique.

⁷⁶ *Ibid*; Wardwell, “Panni Tartarici,” 96.

⁷⁷ Jaro, “Gold Embroidery,” 55.

When it can be difficult even to differentiate Byzantine textiles from the Middle-Eastern and Spanish textiles, how does one tell a silk dalmatic woven in Constantinople from another made in Thebes? This is the level of detail that would help the present work assess the evolving nature of textile production within Byzantium from the end of the eleventh to the end of the thirteenth century. On the whole, currently, there is some uncertainty about how accurately we are able to tell the products of different regions apart based on *comparanda*, weaving techniques, motifs and styles. Thus, the current level of research does not allow us to capture the differences between a piece of silk cloth woven in the Byzantine capital from another made in Boiotia and a robe produced in the state of Nicaea, let alone one made in Constantinople from another made in Almeria. In sum, perhaps more reliable evidence in terms of identifying cloth- and raw-material-producing regions/cities may still come from the contemporary texts (inventories and wills), which is the evidence I will turn to below and in the next chapter for Byzantine-specific data.

Into the Future: The Scientific Archaeology of Dating and Attributing Provenance

Before focusing on the discussion and analysis of the evidence from contemporary inventories, I would also like to evoke briefly the future possibility of identifying the differences between cities within a given region and among geographical areas distant from each other. The type of research that has the potential to

render specific information about the place where the raw material of a piece of clothing came from and where it was dyed, are chemical analyses and the application of new scientific instruments. So far, most of the advances have been made in dye analyses. In general, however, it seems that the scientific analyses of dyes and mordants used on textiles are rarer compared to the analyses done on manuscript illuminations, ceramics, historical paintings, etc.⁷⁸ Nevertheless, the technological improvements and increased experience with the study of objects of historical significance doubtless benefits the study of historical textiles as well. There is immense potential for discovery in scientific dye analyses, especially for those studies that ground themselves in a broader study that takes textual evidence into consideration.⁷⁹ Historical sources sometimes describe explicitly the colors in the everyday objects they used. For example, the inventories are quite descriptive about the colors of valuable textiles. The colors most often used on historical textiles are red, yellow and green. However, black, white and blue, are also fairly often mentioned in the inventories that I have studied.⁸⁰ What more can we learn about these colors and about their application on textiles?

⁷⁸ A classic work that the conservationists use focuses at most on microscopic analyses and goes no further. M. Flury-Lemberg, *Textile Conservation and Research* trans. P. Leibungut (Bern, 1988).

⁷⁹ An informative example of this type of work studies and analyzes the colors used in the Mayan context: S. Houston, C. Brittenham, et. al. *Veiled Brightness. A History of Maya Color* (Austin, 2009).

⁸⁰ For a good description of colors used especially in silk textiles see, Atasoy, et. al. *Ipek*, 194-197.

All dyes may be divided into two main categories consisting of direct dyes and mordant-requiring dyes—alum is a well-known mordant. The first step in dye analysis, therefore, involves detecting the presence (or the absence) of mordant via XRF (X-Ray Fluorescence Spectrometry) and/or Raman spectroscopy.⁸¹ Once the mordant has been detected, research can proceed in two ways: one could either apply the less costly Thin-Layer-Chromatography method to quickly identify what type of dye was used originally; different types of dye sources reveal different ratios of the compound and the eluent (the solvent). The other method—High Performance Liquid Chromatography (HPLC)—on the other hand, is much more effective for our purposes, since it not only identifies the dye but gives the proportions of different chemical elements of which each dye is composed.⁸² What are the potential implications of these methods for our investigation?

Madder, kermes, lac dyes, and brazilwood are all mordant-requiring red dyes.

Let us suppose that the dye of a silk cape we have at hand is from *kermes vermilio* (which

⁸¹ Weld is a (yellow) dye that requires a mordant, saffron and turmeric are yellow dyes that may be directly applied. See, J. H. Hofenk de Graaff with contributions from Wilma G. Th. Roelofs and Maarten R. van Bommel, *The Colorful Past. Origins, Chemistry and Identification of Natural Dyestuffs* (Gardolo, 2004), 22-23. I. M. Bell, Robin J. H. Clark, P. J. Gibbs, "Raman Spectroscopic Library of Natural and Synthetic Pigments," *Spectrochimic Acta Part A* (1997) 53, 2159-2179. Raman spectroscopy measures the wavelength of radiation coming from a laser. Radiation is used to stimulate fluorescence in the measured object. The wavelength itself varies from dye to dye. The authors had started a database of these wavelengths for each color they measured. The website cited in the 1997 article is no longer live.

⁸² *Ibid.*, 35-41.

the Latin texts refer to as “grana”) of the cochineal family.⁸³ Without any chemical analysis, we can deduce that the dye and perhaps the textile are either from Greece, Spain or the Arabian Peninsula since the insect is indigenous to these areas. But that is all we can say, even though there is the additional complication that the insect or its essence could, possibly, be sent to different places. Using the HPLC method, however, we can assess the ratios of the elements of the kermes dye. This means that we may even be able to ascertain further variations in the elemental compositions of the same kermes dye proceeding from different regions, which could potentially mark off the Spanish kermes and the Greek kermes.⁸⁴ Today, in other words, dye analysis, can reliably identify the dye applied on a cloth and attribute it to a region. But perhaps in the not-too-far future this type of analysis will be able to identify different elemental compositions for the same type of dye. For instance, today chemists can quickly discern whether madder or kermes is used in dyeing a carpet red but perhaps they may even be able to fine tune this chemical exercise and discern different compositions within

⁸³ We know that kermes (an insect otherwise called kermes vermilio, the dyer’s kermes, “grana”) was common in Greece, Spain and Saudi Arabia. Dyers collected the female insect about 1 cm in size when her body was full of unlaidd eggs. Other members of this family, the *Porphyrophora polonica* come from northern Europe and the steppes; *kerria lacca* from India and *dactylopius coccus* is found in South America. During their mating season these insects infest everywhere and stain everything red but to “take on” textile tissues they require a mordant. See, D. Cardon, *Natural Dyes Sources, Tradition, Technology and Science* (London, 2007), 607-612.

⁸⁴ Hofenk de Graaff, *The Colorful Past*, 52ff. The chemical compositions for each subset of the cochineal family listed above in note 72 are different. I suppose, therefore, that there may be further divisions within those subsets. Even if differentiating between the kermes on the Turkish coast from those in Greece may not be possible as a result of the similarities in the flora, elevation, etc. it may be possible to differentiate kermes from Greece/Turkey from the “Spanish” and the “Arabic.”

madder, which the current level of our knowledge attributes to a vast region—Central Asia.⁸⁵ This type of evidence would further advance our understanding of textile production and perhaps evince the heretofore undetected steps in production. Caution is still required in drawing firm conclusions, because even if we eventually are able to recognize that the red dye in a chasuble can be traced back to kermes from Greece, this does not at all mean that the cloth was woven in Greece, simply because dyes and mordants were traded. Still, this type of depth is particularly significant for the period before the fourteenth and the fifteenth centuries when the contemporary sources are usually reticent about where their dyes came from.⁸⁶

If the question is “how does one tell apart a buskin woven in Constantinople from one woven in Thebes?” the answer is a complicated one since we know that not all the different components of a garment came from a single location. One of the best demonstrations of this phenomenon is in the pages of *Book of the Eparch* where it is mentioned that silk from Syria and linen from Egypt and Bulgaria were used in cloths

⁸⁵ J. H. Hofenk de Graaff and W. G. Th. Roelofs, “Dyestuffs along the Silk Road: Identification and Interpretation of Dyestuffs from Early Medieval Texts,” in *Central Asian Textiles and their Contexts in the Early Middle Ages* (Bern, 2006), 35-48. Central Asian textiles use madder (HPLC detects the element tannin in the dye and tannin is a marker for madder) in dyeing silk unlike European silks which are dyed with kermes-based dyes. *Ibid.*, 36. Madder was of course used as a dye in Europe for other textiles. The plant, or wild varieties of it, was grown nearly in every major region of the world.

⁸⁶ Fifteenth-century-Florence received grana from Provence, Spain, Romania, Portogallo, Barberia, Polonia. A huge quantity of it came from the Peloponnese, from Corinth and Patras in particular. See, R. Ciasca, *L'arte dei medici e speziali nella storia e nel commercio fiorentino dal secolo XII al XV*. (Florence, 1927), 419-420.

woven in the capital.⁸⁷ The silence in the same source on local raw-silk production within the empire is also worthy of note, especially because the Eparch's *Book* names Kerasos and other areas from within the Empire as sources for flax.⁸⁸ Even though it is currently in a preliminary state, exciting ongoing work based on measuring stable hydrogen isotopes preserved in silk and assigning them a definite geographical locus on the hydrological map of the world, will potentially determine the origin of raw silk used in surviving cloths and garments.⁸⁹ Pollen analysis too can potentially provide badly needed data to disassociate raw silk-producing, that is white mulberry-growing, areas from silk cloth producing areas. I have not noted any work so far which specified the presence of pollens from mulberry trees.⁹⁰ It is possible that the lack of detailed

⁸⁷ See, Part 3, n. 22 above.

⁸⁸ See Part 3, n. 29 above.

⁸⁹ N. Tuross, "Discovering the Silk Road with Stable Isotopes," presented at the Harvard Initiative for the Science of the Human Past Workshop entitled "Isotopic Silk Road: A Conversation about the Science, Archaeology, and History of Silk, The First Global Commodity," (April 3, 2012).

⁹⁰ I think this is because of the technical limitations of ancient pollen (undisturbed accumulations of peat tend to be on high altitudes) but also because researchers usually focus on specific types of plants and seldom specify plant species beyond the generic floral taxa that help them distinguish anthropogenic deforestation from natural forestation or re-forestation. To give only a few examples of pollen analyses from Greece: J. Shay and T. Shay, "Modern Vegetation and Fossil Plant Remains," in G. Rapp Jr., and S. E. Aschenbrenner, ed., *Excavations at Nichoria in Southwest Greece* (Minneapolis, 1978), 41-59; J. Hall and M. Atherden, "The Contribution of Pollen Analysis to the Study of Medieval Crete," in Bintliff and Stöger, *Medieval and Post Medieval Greece. The Corfu Papers* (Oxford, 2009), 55-66. Studies from Turkish sites are rarer and do not usually come from coastal areas. See for example: M. Vermoere, S. Six, J. Poblome, P. Degryse, E. Paulissen, M. Waelkens and E. Smets, "Pollen Sequences from the City of Sagalassos (Pisidia, Southwest Turkey)," *Anatolian Studies* 53 (2003), 161-173; W. J. Eastwood, N. Roberts and H. F. Lamb "Palaeoecological and Archaeological Evidence for Human Occupance in Southwest Turkey: The Beyşehir Occupation Phase," *Anatolian Studies* 48 (1998), 69-86; A. England, W. J. Eastwood, C. N. Roberts, R. Turner, and J. F. Haldon, "Historical Landscape Change in Cappadocia (Central Turkey): a

studies of pollen evidence owes in no small part to the researchers' focus. Pollen analysts usually target specific floral taxa, that is, those taxa that yield the best results for determining the broad contours of anthropogenic forestation and re-forestation. Analysts measure these contours by analyzing the long-term variations in the arboreal (especially oak, pine, olive trees), shrub (maquis, in particular), and vegetal (cereals and vine in particular) contents of the pollens encapsulated in the peats. It is not impossible that because researchers focus on other plants they do not record or notice the pollen from mulberry trees in the peats that they analyze. Yet it is just as well likely that we have not studied the "right places" for pollen analyses.⁹¹

Testing Modern Provenancing of Medieval Textiles with Medieval Documents

I would now like to turn to the contemporary Western inventories and wills that mention the provenances of the clothes they record. These inventories, unlike chemical analyses, do not give any information as to the production stages, but they are invaluable in terms allowing us to identify the international nodes of high-end textile production by giving us the names of the cities or regions which the contemporaries –

Palaeoecological Investigation of Annually Laminated Sediments from Nar Lake," *The Holocene* 18 (2008), 1229–1245.

⁹¹ A. Dunn, "The Rise and Fall of Towns, Loci of Maritime Traffic, and Silk Production: the Problem of Thisvi-Kastoria," in E. Jeffreys, ed., *Byzantine Style, Religion and Civilization* (Cambridge, 2006), 38-71, suggests that if the area around Thisvi-Kastoria (near Naupaktos) were studied carefully we would likely find arboreal pollens of the *morus alba*. Pausanias, who visited the area in the second century, observed the presence of the white mulberry tree.

the inventory makers, the scribes—wrote down as the producers. Given that it is not possible to prove exactly when each item entered the possession of a person or an institution, and because the lists belong to items accumulated over time and inventoried at a specific point in time, the inventoried items themselves must have entered the possession of the institution *before* the date of composition of the inventory. Therefore, to use a term of general history, the inventory's date constitutes a *terminus ante quem* for all the items listed in it. The further assumption made here concerns the vestments with specific provenances the inventory makers gave and noted: unless the inventory was a copy of an older inventory, the fact that the scribes knew from where the vestments came may suggest that these vestments were closer to the time of the writing of the inventory itself, although there is no way of knowing how close unless the name of the donor is given and she or he is known from other historical documents. Regardless, the *ante quem* dates alone allow us to view the inventoried material, as an alternative way of evaluating the datings the museums propose for their medieval textiles. Sheer abundance of the inventoried material allows us to see the major trends in the cities/regions that exported (whether directly or indirectly as gifts) luxury textiles to churches, and we can see this evolution over the *longue durée*.

For this initial evaluation, I examined inventories from seven locations, comprising roughly about 2,200 textile items inventoried across a time span from ca.

1250 to ca. 1500.⁹² I supplemented these church inventories with much smaller and sporadic sets of secular testaments (with about 900 textile entries), which, apart from two mid-thirteenth century wills, all date from the fourteenth century. It is worthy of note that the information on the provenance of textiles one can deduce from the museum collections and historical inventories prepared by contemporaries usually converge, with the caveat that museums almost never list silks from Romania, Cyprus and “Alamania” for textiles between the thirteenth and the fifteenth centuries; contemporary inventories, on the other hand, contain many references to silk garments from especially Romania and Cyprus from the thirteenth century, and thus they do not exclude Byzantium or, potentially, the Greek successor states as a source of silken clothes imported to the West as unequivocally as museum collections and textile historians do for the period after ca. 1200.⁹³

The earliest inventory I study here belongs to St. Paul’s Cathedral in London and was drawn up in 1245.⁹⁴ The inventory contains about three hundred textile items ranging from robes, and capes to pillows and altar clothes. Most or all of the inventoried items are high-end silks, sometimes embellished with motifs, golden

⁹² Inventories vary in size. Sometimes new inventories were added to the first surviving inventory through the fifteenth century. So for example, St Paul of London has two main inventories, one from 1245 the other from 1402, each of them contain about 300 textile entries. I have not studied the 1402 inventory.

⁹³ W. Sparrow Simpson, “Two Inventories of the Cathedral Church of St. Paul, London, dated respectively 1245 and 1402; now, for the First Time, Printed, with an Introduction,” *Archaeologia* 50 (1887).

⁹⁴ *Ibid.*, 439-524. Each inventory contains about 300 textile items.

selves and precious gemstones. The inventory maker(s) distinguished silks, sometimes under the generic term “de sericis” but usually the identification goes beyond the generic term listing the type of the silk and lists the type of weave such as samite, diasper, sendal, baudekin or “imperial” (*de imperiali*).⁹⁵ The identification of the silk type is followed by a description of its color (purple, green, yellow, white, indigo [i.e., blue]), a brief description of its embellishments, and finally, sometimes ends by naming its provenance. A good example is the description of a tunic “imperial:” “another tunic imperial with yellow and red floral designs and golden birds, without a border at the lower side with the shoulder part from golden weave.”⁹⁶ In terms of the silk type most commonly mentioned is the samite silk (mentioned sixty-eight times), followed by diasper which is used only in four cases and *sendal* (also used four times), while the generic term “silk” is used eighteen times. In terms of provenance the only stated references are to Venice (one item), and Syria/Egypt, i.e. Saracen (four items).⁹⁷

We do not know how old the items were, but some were certainly quite old. We also do

⁹⁵ *Ibid.*, 478, 485. The preposition “de” is used to mean both “from” and “made of” sometimes in the same sentence: “Capa...est de rubeo samito cum aurifrigio de Venicia...” *Ibid.*, 477.

⁹⁶ “tunica de imperiali cum arboribus rubeis et leonibus cum avibus aureis sine bordura inferiori cum humerali ex auro contexto.” *Ibid.*, 485. There are a total of six tunics and one dalmatic that are defined as “imperial,” none of which are described as being old.

⁹⁷ “Capa Cintii Romani est de rubeo samito cum aurifrigio de Venicia, aviubs in medio contextis, tota plana. Haec habet morsum non connexum ut dicetur inferius.” (Cape of Cynthus Romanus) *Ibid.*, 477; “Dalmatica de opere Saracenico inveterata et perforata undique, nullius precii.” (an old, Saracen-made dalmatic, with holes everywhere, worth nothing). *Ibid.*, 486 (two more vestments of Saracen origin (de opere Saraceni) are mentioned on p. 489). Byzantine inventories too use the word Saracen for items that they perceive as being of Syrian or Egyptian origin.

not know for sure how many of them were approximately contemporaneous, i.e. from the mid-thirteenth century. Yet, out of about twenty four vestments explicitly identified as “old,” only twice was provenance given; and both times, the silk items were called “Saracen.”⁹⁸ For a garment, being old does not always mean that the item was not in use: in one instance a worn out, torn cope was donated by a contemporary.⁹⁹ Among the ninety-one copes she studied among the 1295 inventory of the same church, Lisa Monnas has identified about twenty entries that were donated to St. Paul’s by contemporaries.¹⁰⁰ However, it is significant that the scribes who wrote this inventory in 1245 (and those who updated it in 1295) wrote down anew or copied from the earlier inventory where some of the copes and mantles had come from. If the items were ancient and had no tag, or there were no earlier inventories identifying the vestments, the scribes would not likely have known where an item was from or where it was made. Hence, we can take the scribes’ identifications quite seriously and think that they are at least as reliable a source as the identifications made by modern museum staff and textile historians. Therefore, a more dependable way to distinguish what is roughly contemporary from what is older is to look at not only the specific textile terms used but

⁹⁸ *Ibid.*, 486, 489.

⁹⁹ “Capa Roberti de Clifford de spisso panno fracta et suspense assignata ad tunicas puerorum.” L. Monnas identifies Robert de Clifford from other documents in the Church archives and concludes that he probably died after c. 1215. He donated many other items to the church one of them is a cope made of imperial cloth with lions: “Capa Roberti de Clifford est de imperiali cum leonibus sine morsu.” Sparrow Simpson, 478. See L. Monnas, *Merchants Princes and Painters*, Appendix 4, 312.

¹⁰⁰ *Ibid.*, Appendix 4, 310-313.

also the provenances, terms such as baudekin, Venetian, Saracen and perhaps also “imperial.” In some cases we can prove that if the provenances are given, the vestments themselves were closer to the time of the date of the inventory itself. The entries with named benefactors and provenances from the 1295 inventory confirm this observation. The 1295 inventory refers to Antioch and Spain as provenances of two copes, whose owners are known to have been either still alive in 1295 or recently deceased.¹⁰¹

Among the four terms, “imperial” is the more complicated and potentially uncertain. According to Lachaud, this term refers to garments of Byzantine, specifically, Constantinopolitan origin. He bases his argument on a passage from William of Mandeville (ca. 1178), while a textile historian, Tietzel, argues, also convincingly, that it just refers to silks with gold embroidery.¹⁰² The descriptions of this type of cloth usually include eagle, lion, or peacock motifs and floral designs with embroidery which can be

¹⁰¹ *Ibid.*, Appendix 4, 312-313: “Capa Roberti Burnel de syndone Yspanie indici coloris quasi indentata,” and “Capa domini Edmundi comitis cornubie de quodam diaspro antioc’ coloris tegulat’ cum arboribus et avibus diasperatis quarum pectora et pedes et flores in medio arborum sunt de aurifilo contextae.” Monnas’s translation of the diasper from Antioch reads: “Cope of Edmund, Earl of Cornwall, of a certain diasper of Antioch the color of tiles (i.e., terracota) diaspered with trees and birds, whose heads, breasts and feet and the flowers in the middle of the trees are woven in gold.”

¹⁰² F. Lachaud, “Les soieries importées en Angleterre (fin XIIe et XIII e siècles),” *Techniques et culture* 34 (1994), 180; Tietzel, *Italienische Seidensgewebe*, 33. The passage from William de Mandeville reads “Comes Willelmus de Magnivilla Jerosolimis rediit viii idus Octobris. Qui peregre profectus, sicut altaria multarum per Angliam ecclesiarum habuerat in memoria, sic et rediens habuit in veneratione, pannos, quos civitas Constantinopolis vocat imperiales, passim locis distribuens religiosos.” See, W. Stubbs ed., *Radulfi de Diceto Decani Lundoniensis Opera Historica*, vol. 1 (Wiesbaden, 1876), 428. “Who, having set out with difficulty, had in mind the altars of many churches across England, so also he held them in veneration when he returned, distributing cloths, which the city of Constantinople calls ‘imperial,’ widely to religious sites.” I would like to thank Prof. McCormick and Shane Bobrycki for advice on translating the excerpt.

used as evidence for both Lachaud and Tietzel's arguments. The term could in fact mean both: i.e. high quality, embroidered golden silk from Byzantium/Constantinople and embroidered golden silks with animal and floral designs which had long been typical of Constantinople, and which in the thirteenth century looked like the older ones but were no longer necessarily made or sold exclusively in Constantinople. In other words, both Lachaud's and Tietzel's interpretations carry weight, depending on the period the term "imperial" was used in. We should note that most of the silk terms used in this inventory are indeed of Greek origin, although it is clear that silk clothes were by 1245 being made in Venice, and of course historically, in "the land of the Saracens."¹⁰³

The inventory of 1245 and the reference in William of Mandeville contain the only two instances that I am aware of which refer to golden altar cloths, silk tunics or dalmatics that were called "imperial" (*vasilikos pannos*?). The relationship between this type of cloth and the city of Constantinople is not certain. Even in William of Mandeville's text we are only told that the cloths he bought in the city were called "imperial." It is, in other words, not certain whether even in the late twelfth century or in the mid-thirteenth century the term "imperial" had anything to do with silks woven in Byzantium. In the 1295 Vatican inventory, on the other hand, the imperial *pannum* is further defined as being "de opere Romanie."¹⁰⁴ It is also noteworthy that the term is

¹⁰³See above Part 3, n. 97.

¹⁰⁴ Molinier, 94: "Item, dalmaticam rubeam de panno imperiali de Romania ad aquilas magnas cum duobus capitibus sine ornamentis; [in] manicis tamen frixia anglicana antiqua et spatulis de Venetiis."

used in a Lucchese notarial act from 1200, which contains an inventory of the possession of the Lucchese churches that lists two “imperial” cloths.¹⁰⁵ Once again we are in the dark about where this type of cloth was actually made (it might have been made, of course, in multiple *loci*). More than a century and a half later in 1376, however, this time the Lucchese silk weavers’ regulations refer to a heavy, expensive silk called “imperial” which the Lucchese weavers were manufacturing.¹⁰⁶ In the fourteenth century, when Lucca was a well-known producer of such quality silks, we encounter the term again in a church inventory.¹⁰⁷ All together this evidence suggests that even if—as is likely, but not certain—the term originally referred to a type of Byzantine silk cloth of the highest quality, this cloth was no longer associated with Byzantium in the fourteenth century, for silks so designated were manufactured above all in Lucca. If the

This dalmatic is certainly not unique in its eclectic ornamentation as there are many eclectic (i.e. different parts from different sources) items like it. It has English ornamentation on the sleeves and Venetian ornamentation on the shoulders. The eagle heads do not bear any ornaments.

¹⁰⁵ The reference is in T. Bini, *I Lucchesia a Venezia. Alcuni studi sopra I secoli xiii e xiv* (Lucca, 1853), 69-70. The author states that the inventory is from a notarial act from Lucca but does not give further detail.

¹⁰⁶ Lucca silk weavers’ regulations (1376) support Tietzel’s argument. In the regulations “racamati” and “imperiali” are among the two most expensive, heaviest type of silk cloths. See, D. and M. King, “Silk Weavers of Lucca in 1376,” in eds. I. Estham and M. Nockert, *Opera Textilia Variorum Temporum* (Stockholm, 1988), 68-69.

¹⁰⁷ I noted one more reference so far in the 1361 Vatican inventory, which seems to use the word “imperial” in a different sense (“belonging to the emperor”) than in the 1245 and 1295 inventories. The 1361 inventory referring not to its cloth type but owner names this very Byzantine dalmatic, “imperial” (not “de imperiali” as in 1245 or “de panno imperiali” as in 1295), calling it “of Constantine:” “Item una dalmatica Imperialis sollempnissima, que dicitur Costant[ini] de dyaspero albo laborato ad rotas de auro, et serico, in quibus sunt grifones et pappagalli et aquile cum duobus capitibus, crucibus in medio de auro et serico, cum fimbriis et manicis deauratis cum figuris in rotis ad perlas, et cum duabus cordis de perlis circumcirca. Cum armato ad collum, et ad spatulas ad filum ornamentum de perlis, foderat. De sindone rubeo.” Münz and Frothingham, 38.

cloth was originally woven in the Byzantine Empire and distributed to the rest of the world from there, then, when other silk centers began producing this cloth perhaps during and after the thirteenth century, the association of it with Byzantium was broken. On the other hand, the term and the identification of this high-quality silk lived on in textile terminology in the subsequent centuries.

Romania is not a term used in the 1245 St. Paul (London) inventory or its 1295 update, neither do we come across it in the accounts on the capture of Constantinople in 1204 and the translation of the city's relics to the West that are collected in Riant's *Exuviae*.¹⁰⁸ It seems that after 1204 Romania retained its geographical focus and continued to stand for the core "ex-Byzantine/Roman lands," no matter the ethnic identity of the groups that held different parts of it. John III Vatatzes, ruler of the Nicaean state, for example, was called "imperator Romanie" by the Genoese, not unlike the Venetian doge who is described as the "lord of a quarter and a half of all of Romania."¹⁰⁹ Stefan Dušan of Serbia (1334-1361), in a similar vein, after his conquest in

¹⁰⁸ P. E. D. Riant, *Exuviae Sacrae Constantinopolitanae*, 3 vols. (Paris, 1877-1904). According to R. L. Wolff, "Romania: The Latin Empire of Constantinople," *Speculum* 23. 1. (1948), 16-22, in Western usage (except for southern Italy) the word Romania was not common before 1204. In the two rare instances of Western mentions of Romania, Wolff claims that the sources were in fact Byzantine. Before 1204 the Crusaders, on the other hand, used the term specifically to refer to Asia Minor which sometimes included Syria. *Ibid.*, 22-28. I would like to thank Prof. D. Angelov for the reference.

¹⁰⁹ In the Genoese annals, *Annali Genovesi* (1231 A.D.), 57, John III Vatatzes is referred to as "imperator Romanie." R. L. Wolff claims that the Genoese continued to refer to the Nicaeans as such because they were reluctant to recognize the Latin Empire. Wolff, "Romania: The Latin Empire of Constantinople," 13. This reluctance is not evident in the Genoese agreements that involve the Venetians where the Venetian doge is called the "lord of a quarter and a half of all of Romania." This addition becomes a part of the

the western Balkans up to the city of Kavala, termed himself in his chrysobulls issued for various Athonite monasteries, as “emperor and *autokrator* of Serbia and Romania.”¹¹⁰ The States of Nicaea and Epiros were in “Romania” but, at least in Western terminology, areas to the east of Nicaea which were consistently under Turkish or Armenian control were not included in Romania.¹¹¹ Crete in the south was obviously part of Romania but not Cyprus, which is treated separately.¹¹² Nevertheless, the discrepancy between the thirteenth- and fourteenth-century provenances listed for museum’s holdings and the descriptions of provenances from the thirteenth and fourteenth centuries written by contemporary scribes is worthy of note. The discrepancy is that Romania and Cyprus are absent from the museum lists, even though they are consistently present in the contemporary inventories through the fourteenth century.

doge’s title after 1204. See, S. Dellacasa, ed., *I Libri iurium della Repubblica di Genova* vol. I/4 (Rome, 1998), 62, 181, 184, 192, 272, to give a few examples from the thirteenth century Genoese archives.

¹¹⁰ One example from 1352 should suffice: J. Bompaire, *Actes de Xéropotamou* (Paris, 1964), 189, line 66.

¹¹¹ See Balard, “Les Génois en Romanie entre 1204 et 1261. Recherches dans les minutiers notariaux génois,” in *Mélanges d’archéologie et d’histoire* 78 (1966), 470; F. Thiriet, *La Romaine vénitienne au Moyen Âge* (Paris, 1959), 3-5 on the sundry uses of the term during and following the thirteenth century. I do not think that the ambiguity of the term was ever lost. It might be that as the Turks advanced in Asia Minor and Greece, and given the diversity of ethnicities in both the Balkans and Greece, from the latter half of the thirteenth century on ethnic identification might have suited the political reality better. To complement Part 3, n. 109 above, the Genoese refer to Michael VIII as “imperator et moderator Grecorum” in 1261 while Ibn Battuta uses Turkey and “the land of the Rum” in reference to Turkish Asia Minor in the fourteenth century. *Libri Iurium*, 272, 286, 478, 480. *Ibn Battuta*, 415, 432-433 and *passim*.

¹¹² A. Nicolaou-Konnari and C. Schabel, eds., *Cyprus. Society and Culture 1191-1374* (Leiden, 2005), 155, 280, 294. The book does not discuss the meaning of the term in relation to the island but implies that it was separate from Romania, “as the Aegean area was called.” (on p. 155).

Much like the word “imperial” which was likely originally a Byzantine textile term which continued to be used in the fourteenth century inventories and in the Lucchese silk weavers’ regulations from 1376,¹¹³ the other Byzantine terms such as samite, *diasper* and sendal also lived on in western textile terminology.¹¹⁴ They are often encountered in church inventories as immediately identifiable features of the garments and cloths inventoried throughout the thirteenth and the fourteenth centuries.¹¹⁵ In terms of provenance, Venice, Pisa, “Alamania,” “Tartary,” Lombardy, Lucca, Spain, Romania, Cyprus and England are the most often mentioned regions and/cities where high-end silk, velvet or wool cloths and garments were made in these two centuries. If we compare the above list with the museum holdings, it will be evident that the museum holdings either misidentified or simply lack thirteenth- and fourteenth-century holdings from Cyprus and Romania which were important categories of textiles in the

¹¹³ See above Part 3, n. 106.

¹¹⁴ On sendals see above, p. 349.

¹¹⁵ B. Cecchetti, “Testamento di Pietro Vioni Veneziano fatto in Tauris (Persia) X Dicembre,” *Archivio Veneto* 26 (1883), 161-165. This short inventory of Venetian merchant Pietro Vioni, issued in eastern Turkey/Persia in 1264, mentions bulk *tela* (“cloth” according to DuCange, 45) from Lombardy, “Alemagna” and Venice, eight “pieces” of black stanfort and a saddle decorated with precious stones and diasper cloth. *Ibid.*, 163-164; The Venetian *Liber Plegiorum Communis* (1225), according to Cecchetti, mentions scarlets, sendals and stanforts. See, B. Cecchetti, *La vita dei veneziani nel 1300. Le vesti* (Venice, 1886), 13-14. The Genoese inventories preserved in notarial documents issued between 1230 and 1261 refer to sendals (among them twice to “cendal chylamides”), samites, “vellatas” (velvets), stanforts and scarlets [(scarlet *gonellas* “leather coat or habits” according to Blaise, *Lexicon* (on-line DLD) which may have wool parts as another *gonella* is defined as “gonellam stanfortis”]. See, R. Lopez, “Nota sulla composizione dei patrimoni privati nella prima metà del duecento,” *Documenti e studi per la storia del commercio e del dritto commerciale italiano* 8 (1936), 224, 227, 232, 246, 247, 259, 262. Another inventory that belonged to the French lord of Nevers who died in Acre in 1266 mentions twelve “dras de tartais” (cloth or garment from Tartary), bucherams: M. Chazaud, “Inventaire et comptes de la succession d’études, comte de Nevers (Acre 1266),” *Memories de la société des antiquaires de France* 32 (1871), 202, 203, 206.

inventories and testaments. The island and the region, even though they retained a significant presence in the thirteenth- and fourteenth-century inventories and testaments, are never listed as sources of silken garments or cloths among European museums' thirteenth- and fourteenth-century holdings.¹¹⁶

To give a few illuminating figures from the thirteenth century, it is worthy of note that in the 1295 Vatican Inventory, which happens to be the most extensive inventory from the thirteenth century, textiles from Romania are mentioned thirty-four times, while their closest competitors, the textiles from Tartary (Central Asia, more specifically, the area corresponding roughly to modern Uzbekistan, if "Tartar" and "Tochar" are from the same root) and England are listed twenty-seven and twenty-five times respectively.¹¹⁷ Textiles from Cyprus and Lucca take fourth and fifth place with respectively seventeen and fourteen textiles each.¹¹⁸ The collective number of inventories and testaments from the thirteenth century are smaller (only three)¹¹⁹ in

¹¹⁶ See for example the patterned tunic, et. al. "de Romania" that previously belonged to the archbishop of Nicosia, Cyprus in the 1369 inventory from Pisa. R. Barsotti, *Gli Antichi inventari della cattedrale di Pisa* (Pisa, 1959), 53.

¹¹⁷ On the origins of the word Tartar and Tochar see <http://www.hunmagyar.org/turan/tatar/tatar-origin.html> (Accessed 10. 12. 2012); Molinier, 88-132.

¹¹⁸ Molinier, 90-131. I included not only the references listed under their respective regions but also those mentioned elsewhere in the inventory. Paris Notre Dame's inventory (1343) lists 144 textiles, no provenances other than Lucca, Cyprus are listed. G. Fagniez, "Inventaires du trésor de Notre Dame de Paris," *Révue archéologique* 27 (Jan-June, 1874), 249-259 and *Révue archéologique* 28 (July-December, 1874), 83-102. References to Lucca (pp. 90, 92, 94, 96, 98, 99) and Cyprus (p. 99) are from the later issue.

¹¹⁹ St Paul (London) 1245, St. Peter 1294, and the Vatican 1295 inventories. St. Paul inventory only mentions Venetian and Saracen textiles; St. Peter 1294 mentions a few textiles from Cyprus, England,

number and content compared those from the fourteenth century (six) which also tend to be much larger.¹²⁰ I therefore believe that the longest and the most inclusive list from the Vatican inventory can be tentatively taken as a roughly representative of the proportions of the most important production centers from the thirteenth century that fed the Vatican treasury via gifts or purchases.

In the fourteenth century, on the other hand, when all six of the church and royal inventories are added together, the result is that Lucca had the highest number of references (eighty-eight or approximately forty percent of the 218 textiles with given provenances) followed by Romania (sixty-one, or approximately twenty-eight percent), “Tartary” (twenty-one, or approximately ten percent), Cyprus (seventeen, or approximately eight percent) and England (sixteen, or approximately seven percent).¹²¹ In contrast, the classifications of the museum holdings do not seem to be consistent with what the written evidence shows regarding textiles from the Aegean basin and Cyprus. This is true despite the limited focus—i.e. concentration on higher-end textiles—of both

Tartary, Germany and Lucca. However the inventory is only three pages long. For the thirteenth century I used only the Vatican 1295 inventory because it is much more comprehensive. For the complete list see Appendix 2.

¹²⁰ See the appendix for the list of these inventories.

¹²¹ In addition to n. 116 above see these two inventories of the French kings Philip the Tall (1317-1322) and Charles V (1364-1380): L. Douet, *Nouveau recueil de comptes de l'argenterie des rois de France* (Paris, 1874), 17, 29-32, 48, 70-71, 81, ff and J. Labarte, *Inventaire du mobilier de Charles V, Roi de France* (Paris, 1879), 135, 140-141, 143, 145, 362, 364, 365, 368, 370. The English references are often to *frixium* (frigium, fregium as alternative spellings), to the ornaments along the edges of copes, pluvials, etc. It is not consistently possible to distinguish silk items in the inventories hence I included all the references to provenances whether or not silk was specified.

the church inventories and the museum collections, many of whose holdings in fact come from former church and monastery collections themselves. Even though the museum holdings I have studied hail from the Netherlands, Germany, France, and the Vatican, which cover areas where the inventories themselves hail from, not a single one of the museums refer to a silk item among their holdings dated to the thirteenth and the fourteenth century as coming from either Cyprus or to Romania (or to any country that is included within this historical term). In contrast almost all the inventories studied here refer to Romania and Cyprus consistently from the thirteenth through the fourteenth century. This discrepancy may have been caused by misidentification of the museums' late medieval textile holdings. If we rely on the church inventories and their assessment of their textile holdings, however, we are led to conclude that Romania and Cyprus were important silk producers in the thirteenth and fourteenth centuries.

The two contemporaneous but different inventories from the Vatican archives are quite significant in illuminating some common types and provenance of high end textiles in the West by the end of the thirteenth century. These were the very first inventories begun under Boniface VIII which list papal items accumulated over time. Unfortunately, as is the case regarding the 1245 St. Paul (London) inventory, regarding the dates of the listed articles in the papal inventories too we do not have further

information beyond the indication provided in the documents themselves.¹²² As I argued above, these definitions are quite illuminating; for the roughly contemporary items, the scribes knew and noted where the cloths or garments came from. The overlaps between these inventories and the early- to mid-thirteenth century testaments, alongside the 1245 inventory of London's St. Paul Cathedral, strengthens this opinion. Hence, based on the inventories, we have a fairly reliable list of names of the important textile producing regions from the end of the thirteenth century. There is room for error; nevertheless, the cumulative figures are illuminating.

The 1294 inventory of the Vatican is only three pages long but it lists copes and cloths from Cyprus (with golden orfrey from England), England, Lucca, "Tartary" and altar cloths from Germany, i.e. "Alamania."¹²³ The 1295 inventory, on the other hand, is much more extensive as it contains about 1,650 mostly liturgical items ranging from textiles to ivory icons and liturgical vessels.¹²⁴ In addition to Cyprus, England, Lucca and Germany, alongside a whole section on Tartar cloths, the 1295 inventory refers to

¹²² Molinier, 2-3. This edition is based on a seventeenth century copy of the original which the author did not see but assumes is in the Vatican archives. *Ibid.*, 4; Münz and Frothingham, 11-13.

¹²³ "Item unum pluviale nobilissimum de opere Cyprensi ad ymagines cum aurifrigio Anglicano ad perlas," "a most lavish (or noble) cope of Cypriot workmanship, decorated with images, with a golden fringe (golden orfrey) in English style with pearls."); another "most lavish [or noble]" dalmatic from Cyprus; three golden fringes (or orfreys) from Cyprus one from England; a cape made of "panno tartarico;" seven cloths of various colors from Lucca; twenty altar covers (*tobalea*) "all of which are in German workmanship" ("quam operis Alamanici"). Münz and Frothingham, 11-12. I would like to thank Shane Bobrycki for his suggestions for my translation.

¹²⁴ See contents on *Ibid.*, 6-7.

Spanish, Venetian, Salernitan silks, and silks from Romania.¹²⁵ In the inventory, all of the items with provenance identified as “Romania” are textiles, and among a total of 590 textile items there are about thirty-four (approximately six percent) “Romanian” (i.e. of Romanian workmanship) textiles while seventeen (approximately three percent) are from Cyprus.¹²⁶ However, if we count only the textiles for which a region or a city is mentioned as provenance (total of 139 textiles), then the Romanian textiles constitute a solid twenty-four percent of the total, followed by Tartary (nineteen percent), England (seventeen percent) and Cyprus (twelve percent). Lucca and Spanish silks occupy a smaller proportion of these textiles, where each take up about ten percent of the total with Alamania following in their footsteps with seven percent. The descriptions of these textiles—*panni*, tunics, robes, altar covers with typical (but not exclusively) “Byzantine” motifs such as griffons and eagles—are not specific indications of their date or provenance. It is also significant that the inventory writers did not distinguish the textiles possibly produced in various parts of Romania but grouped them together. In this regard it is important to note that they did distinguish the Cypriote copes from their “Romanian” counterparts.

¹²⁵ I choose not to list all the references to all of the listed sites here; Tartar, Romanian, Venetian, Spanish, “Lombard and German,” as well as Pisan altar cloths and altar cloths from Remois in the Champagne region (“tele Remenses et Pisane”) have their own subheadings but they are sometimes listed outside the allotted section.

¹²⁶ The colors of garments of Romanian workmanship are often ruby or violet and (once) green. See, Molinier, 96 (for the green pannus), 109, and *passim*. Cypriot ones could, in addition, be white. *Ibid.*, 91.

The grouping of Romanian textiles together does not necessarily imply that they were produced in a single location but it does suggest that stylistically they were similar to each other. As we have discussed above, in the thirteenth century, Romania could refer to the whole Aegean basin, including the French or Venetian possessions in the former Byzantine Empire, or to the possessions of the Greek successor states in the Balkans and Asia Minor. There is evidence that silk-cloth production continued in all three parts of Romania; Achaia, Euboeia, and possibly Thebes, as Jacoby observed, based on the annual gifts that were sent from Achaia and Euboeia (Negroponte) to the abbey of Cluny and the church of San Marco in Venice respectively in the thirteenth century.¹²⁷ It is, however, significant that the inventory makers did not differentiate textiles in Romania, hence there must have been at the very least a stylistic similarity among the three political divisions within Romania (Venetian, French and Greek) that

¹²⁷ Regarding (the possibility of) Thebes the evidence comes from a 1240 trade agreement between the Genoese and Guy I de la Roche of the Duchy of Athens (who owned Thebes), where the latter claims his right to tax the silks produced by the Genoese or for the Genoese in the Duchy the same amount that is customarily paid by others: "eo salvo quod de panni sericis ab eisdem Ianuensibus vel pro eis in terra nostra textis seu compositis, ipsi Ianuenses nobis solvere teneantur id quod ab aliis exigi solitum est et haberi." *Historiae patriae monumenta. Edita iussu regis Caroli Alberti. Liber iurium republicae Genuensis* (Turin, 1854), vol. 1, cols. 992-993. Also see Jacoby, "Silk Crosses the Mediterranean," 68-69. In 1210 archbishop Anthelmus of Patras concedes to the annual donation of an "optimum examitum" to the mother monastery of Cluny: L. Mas Latrie, "Donation à l'abbaye de Cluny du monastère de Hiero Komio près de Patras en 1210," in *Bibliothèque de l'École des Chartes* vol. 5. 2nd series (Paris, 1848-1849), 308-312 (the document is on p. 312). Geoffrey Villehardouin I of Achaia, and Ravano dalle Carceri, lord of Euboeia (Negroponte in the text), both agreed to send silk copes, or altar cloths annually to San Marco in Venice in 1209. *TTh* II, 90, 93, 176 (with the rulers of Euboeia, repeated in 1256 *TTh* III, 14) and *TTh* II, 97 (Achaia). These sources are discussed in Jacoby, "Silk in western Byzantium," 469-470. The documents from the Makrinitissa monastery on the slopes of Mt. Pelion near Volos (only about 50km north of Negroponte) mention mulberry trees in two different documents from 1271 and 1272 respectively. *MM* 4, 365, line 6; 395, line 54. In the first case the mulberry trees are listed as among the taxable properties of the monastery and, in the second case, they are sold to the monastery.

set them apart from the textiles of the rest. If this is true, then the distinction of Cypriot textiles from those of Romanian origin is indeed interesting, but one which cannot be explained further at the moment. This situation is complicated further by the presence of at least one elaborate textile identified in the 1369 Pisan inventory as “de Romania” but which previously belonged to the Archbishop of Nicosia.¹²⁸ This seems to show that the inventory makers, at least the person or persons who wrote the Pisan inventory of 1369, did not assign provenance according to its owner; a textile owned by a Cypriot archbishop was distinguished and noted down as being of Romanian workmanship. This piece of evidence also alerts us to the fact that the Romanian textiles, even though we do not know their volume, were possibly being exported to the eastern Mediterranean. Regardless, unfortunately, all we can say at this point about the papal inventory from 1295 is that about six percent (twenty-four percent of a total of 139 textiles with given provenances) of all the textiles mentioned in it were listed as being of “Romanian workmanship” and about three percent (twelve percent of these with specific provenances) were products of Cyprus. Again, in contrast with the contemporary museum holdings these late thirteenth-century inventories confirm the important presence of Cyprus and Romania among the regions where luxury textiles were imported into Europe in the late thirteenth and early fourteenth centuries, which

¹²⁸ The Pisan inventory lists only Romania and seems to consider Cypriot items among them, I believe, because there is at least one set of garments that belonged to the archbishop of Nicosia described as being “from Romania:” “Planetam, dalmaticam, tunicellam, pluviale de nacho bendato de Romania que fuerunt olim domini Archiepiscopi Nicosiensis.” See n. 116 above.

the museums never mention, either rightfully, because these items did not survive, or more likely, because they have been misidentified.¹²⁹ The assumption that all of the inventoried copes and dalmatics were looted from Constantinople and brought to the Vatican after 1204, or sent as gifts is also not a satisfactory explanation.¹³⁰

Admittedly, however, the size of silk cloth/garment donations, which are explicitly mentioned in texts, cannot be ignored either. We do not know exactly what proportion of the foreign textiles entered church or monastery treasuries as gifts or as direct purchases. Regardless, early fourteenth-century inventories are quite similar to their immediate predecessors in terms of cloth/garment types (*sendal*, *katasamite*, *diasper*, etc.) and provenances, with a difference: Antioch, Damascus, Turkey, India and finally, Genoa are new additions to the growing list of luxury silk cloth/garment producers.¹³¹ Lucca, Tartary, Cyprus and England still have a strong presence in these inventories, the only difference being that the *panni* from Romania which had first place in the thirteenth century retreated to a, still strong, second place in the fourteenth

¹²⁹ Regarding Cyprus' involvement in textile trade see, C. Desimoni, "Actes passés à Famaguste de 1299 à 1301. Par devant le notaire Génois Lamberto di Sambuceto," *Révue de l'Orient Latin* 1 (1893), 276, 286-287, 291-294, 309.

¹³⁰ See n. 108 above.

¹³¹ The Avignon inventories have cushions from Limoges (*Lemouicensi*) in 1314, Damascus in the 1342, 1353 and 1371 inventories and Alexandria in the 1369 inventory in addition to the above-mentioned cities and regions: H. Hoberg, *Die Inventare des päpstlichen schatzes in Avignon* (Vatican, 1944), 10 (Limoges), 212, 327, 452 (Damascus), 458 (Alexandria). The 1369 inventory mentions casula "de Grecia" and copes and tunics "de opere Romano." *Ibid.*, 454, 439 and 457 ("de opere Romano"). Canterbury inventory from 1315, on the other hand, lists Antioch, India, Genoa and Turkey anew. See J. Dart, *The History and Antiquities of the Cathedral Church of Canterbury* (London, 1726), 224, 227, 229, 230 and *passim*.

century.¹³² One should mention here that at least three late-fourteenth century (1369, 1387, 1394) inventories refer to textiles from Romania and one fifteenth-century inventory (1489) mentions a dalmatic “ex opere Greco” (Romania is never used in this latter inventory); however, I have not studied enough documents from the fifteenth century to assess the fate of the textiles from Romania or Greece collectively in that century.¹³³

What Part of Romania was the “Romania” of the Inventories?

The flow of gifts and purchases from Romania to the Vatican and the West, in general, clearly continued well after 1204. The challenge then is to identify which part of Romania was the most common supplier of the textiles that were sent as gifts or exported to the West. This is not a question we can answer definitively, but the surviving evidence points more toward the Achaia (Clarentza in particular), Boiotia (Thebes) and the Negroponte. However, the Latin Empire in Constantinople, the

¹³² Editors of the inventories are sometimes not certain if the terms “de Romano” and “de Romania” actually refer to Romania. For example, the Vatican inventory of 1361 has about twelve instances where the golden fringes of a usually Luccan cope or cloth is from Romania (?), “de Romano” in the text. Münz and Frothingham, 19-35. “De Romano/Romanico” (as in a random example: “unum pluviale de dyaspro albo...de opere Romanico”) is used again in the Avignon inventory so I have accepted these iterations as variations of the word Romania. See Hoberg, *Die Inventare des päpstlichen Schatzes in Avignon*, 439-440, 457. One exception is the inventory of the cathedral of Pisa. Its 1364 inventory lists twenty one textiles from Romania among over 400 textile entries most of which are listed as Luccan, Venetian, Syrian and Turkish origin—in that order. See, Barsotti, 37-73.

¹³³ Hoberg, *Die Inventare des päpstlichen Schatzes in Avignon*, 454; E. Münz, A.L. Frothingham, 117. The inventory of the cathedral of Pisa which goes up to 1608 is no exception. See, R. Barsotti, *Gli Antichi inventari della cattedrale di Pisa* (Pisa, 1959). The latest inventory with references to textiles from Romania is from 1394 but there are no mentions of Greece or Romania from thereafter either.

Despotate of Epiros and definitely the Nicaean state, cannot be excluded from the list of suppliers. There is varying qualities of evidence for all three regions in the sources. The sources studied here, however, point to the relative significance of formerly Byzantine possessions under Venetian and French control after 1204 compared to the Greek successor states.

A few examples should suffice: Geoffrey Villehardouin I of Achaia, and Ravano dalle Carceri, lord of Euboeia (Negroponte in the text), both agreed to send silk copes, or altar cloths, annually to San Marco in Venice in 1209.¹³⁴ In 1210, archbishop Anthelmus of Patras conceded to the annual donation of an “optimum examitum” to the mother monastery of Cluny.¹³⁵ Regarding silk production in Thebes the evidence comes from a 1240 trade agreement between the Genoese and Guy I de la Roche of the Duchy of Athens (who owned Thebes), where the latter claims his right to tax the silks produced by the Genoese or for the Genoese in the Duchy, the same amount that is customarily paid by everyone else.¹³⁶ In August 1262, Pope Urban IV ordered a prior of Andravida (in the Peloponnese, 12km east of Clarentza) and a canon of the Church of

¹³⁴ *TTh* II, 90, 93, 176 (with the rulers of Euboeia, repeated in 1256 *TTh* III, 14) and *TTh* II, 97 (Achaia). See Jacoby, “Silk in western Byzantium,” 469-470.

¹³⁵ L. Mas Latrie, “Donation à l’abbaye de Cluny du monastère de Hiero Komio près de Patras en 1210,” in *Bibliothèque de l’École des Chartes* vol. 5. 2nd series (Paris, 1848-1849), 308-312 (the document is on p. 312). See Jacoby, “Silk in western Byzantium,” 469-470.

¹³⁶ “...eo salvo quod de panni sericis ab eisdem Ianuensibus vel pro eis in terra nostra textis seu compositis, ipsi Ianuenses nobis solvere teneantur id quod ab aliis exigi solitum est et haberi.” *Liber iurium reipublicae Genuensis* (Genoa, 1854), cols. 992-993. Also see Jacoby, “Silk Crosses the Mediterranean,” 68-69.

Corinth to find and purchase forty or more of good quality, well-dyed, green, ruby, violet, and white samites, which “can be found in those areas,” ten of each color, for the exorbitant sum of 2,000 *hyperpyra*.¹³⁷ In 1294 Philip of Taranto, in return for recognition of his lordship over the Principality of Achaia, Duchy of Athens, parts of Thessaly, Albania, Corfu and Butrint, agreed to send annually a total of twelve “samites of three colors” to his overlord, King Charles II of Sicily and his descendants.¹³⁸ We read in the Venetian registers from 1300 that the dukes of Achaia were charged to send twenty samites to Venice which would then be sent to the Vatican in the name of the Doge.¹³⁹ Thebes is listed separately, alongside Romania, but separately from it, in two separate Avignon inventories that date from 1353 and 1369 respectively.¹⁴⁰ One of the latest Western inventories studied here (dating from 1387) that mentions Thebes and

¹³⁷ “De dictis vero duo milibus ypperperorum quadraginta exameta vel plura de melioribus et electionibus que in ipsius partibus poterunt inveniri, diversorum colorum et bene tincta, viridis, violacei, rubei et albi videlicet cuiuslibet ipsorum colorum decem pecias...emere procuretis...” J. Guiraud, *Les registres d’Urbain IV (1261-1264)*, vol. 1 (Paris, 1901), 17. Each samite would cost slightly less than 50 *hyperpyra*—a large sum that attests to the high quality of these silks.

¹³⁸ “[Philippus et suis heredes]...nosque ac predictos heredes et successores nostros in superiores dominos exinde recognoscant, ac proinde sex samita de tribus coloribus nobis dictisque nostris heredibus et successoribus in recognitionem nostri majoris domini...exhibere annis singulis teneantur.” C. Perrat and J. Longnon, *Actes relatifs à la principauté de Morée, 1289-1300* (Paris, 1967), 113-114 (nos. 116 and 117). Each document requires the payment of six samites each, hence, twelve in total; Jacoby, “The Production of Silk Textiles in Latin Greece,” 29. When William Grosseteste, the vicar or Philip of Taranto, died in 1300, the 500 *hyperpyra*, three samites and four *katasamites* in his possession devolved to King Charles II. *Ibid.*, 194-196

¹³⁹ E. Favano, *Cassiere della bolla Ducale. Grazie-Novus Liber (1299-1305)*, (Venice, 1962), 32 (no. 136). These twenty samites cost 48 *grossi* (approximately 14 *hyperpyra* each).

¹⁴⁰ Hoberg, 207 (1353) and 456-457 (1369). Also see Jacoby, “The Production of Silk Textiles in Latin Greece,” 26.

Romania was written for and under the rule of Charles V of France.¹⁴¹ In addition, the documents from the Makrinitissa Monastery in Thessaly on the slopes of Mt. Pelion near Volos (only about 50km north of Negroponte) mention mulberry trees in two different documents from 1271 and 1272 respectively.¹⁴² Jacoby has advanced further evidence extending to the end of the fourteenth century, that shows the continued exports of silks (specifically samites) from the Venetian- and French-controlled parts of Greece to the West.¹⁴³ It is worth recalling here that these were the areas where the most important silk-cloth producing sites of the late eleventh and twelfth centuries, Thebes and Andros in particular, were situated. The earliest explicit references to Andros comes, as we will remember, from ca. 1102 when Saewulf visited Greece. Saewulf himself stated already then that Andros was famous for its sendals and samites.¹⁴⁴ Urban IV's and Philip of Taranto's specific orders to their associates to acquire samites is informative in this regard and points to the continuation of specifically the samite production in Boiotia, the Peloponnese and the surrounding islands. It seems, then, that these sites continued to operate under their Venetian and French rulers through the thirteenth century.

¹⁴¹ Labarte, *Inventaire du mobilier de Charles V, Roi de France*, 140-141, 368, 374.

¹⁴² MM 4, 365, line 6; 395, line 54. In the first case the mulberry trees are listed as among the taxable properties of the monastery and, in the second case, they are sold to the monastery.

¹⁴³ Jacoby, "Genoa, Silk Trade and Silk Manufacture in the Mediterranean Region (ca. 1100-1300)," in *idem.*, *Commercial Exchange*, 22-23; Jacoby, "The Production of Silk Textiles in Latin Greece," 25-29.

¹⁴⁴ See Part 3, n. 43 above for Andros and Saewulf's reference to it.

In terms of Epirote silks in the West, the only possible example known to us hails from Venice. Laurent and Guillou date this large silken item, a *peplos* (in this case, an altar cover) with a gold-stitched inscription naming a certain *Sebastokrator* Constantine Angelos Komnenos, to the second half of the twelfth century. The description of the *sebastokrator* ("Komnenian born, sebastokrator of the Angeloi family, descendant of the ruler of the Ausonoi.") best fits, in their view, the brother of emperors Isaac II and Alex III. The altar cover, if Laurent and Guillou's ascriptions are correct, likely arrived in Venice as a spoil after the sack of 1204.¹⁴⁵ It is alternatively dated by Theocharis to the early thirteenth century. Theocharis identifies the *Sebastokrator* Constantine as the son of Michael I of Epiros (1204-1215).¹⁴⁶ Hilsdale, who inspected the altar cloth and the historical, diplomatic circumstances associated with it, agrees with Theocharis, and dates it more specifically to ca. 1210, the year Venice and Epiros signed a trade agreement.¹⁴⁷ The size (80X240cm) and the quality of the altar cover indicate that it was made in a center well-versed in silk cloth production. Although there is direct evidence from Epiros that raw silk was produced there, none of the cities in the so-called

¹⁴⁵ The *peplos* is currently preserved in the Museum of St. Mark in Venice. V. Laurent, "Le sébastocrator Constantine Ange et le péplum du Musée de Saint-Marc à Venise," *REB* 18 (1960), 208-213. A. Guillou, "Inscriptions byzantines d'Italie sur tissu," in I. Ševcenko and I. Hutter, eds., *Aetos: Studies in Honour of Cyril Mango Presented to Him on April* (Stuttgart, 1998), 172-174.

¹⁴⁶ M. Theocharis, "Sur le Sébastokrator Constantin Comnène Ange et l'endyté du musée de Saint Marc à Venise," *BZ* 56 (1963), 273-283; *idem.*, "Il ricami," in H.R. Hahnloser, ed., *Il tesoro di San Marco. Il tesoro e il museo* (Florence, 1971), 91-96.

¹⁴⁷ Hilsdale, 163-164.

despotate is known as a silk cloth production center in the way, for example, Thebes was known.¹⁴⁸ More importantly, I am not aware of even implicit evidence that suggests the possibility of silk cloth production in the Epirote state. This is unlike the circumstantial evidence from Nicaea which does imply that silk clothes were produced there. Nevertheless, if I am wrong and if silk cloths and garments were indeed produced in Epiros, this is the only known possible example that it was sent to and survives the West. This leaves us with a secondarily significant region in Romania that might have exported silks to the West, even though, it seems, to a much smaller degree than the conquered areas under European control.

In fact, the Vatican inventory of 1295 mentions an elaborate *pannus* that depicts a Palaiologan emperor—probably Michael VIII or Andronikos II (1272-1328)—very likely sent on the occasion of the union of the churches instigated under the former emperor’s leadership.¹⁴⁹ A silk *pallium* currently preserved in the Museo di Sant’Agostino in Genoa

¹⁴⁸ See Part 3, n. 297.

¹⁴⁹ Molinier, 82-83: “Item unum pannum pro dorsale, totum laboratum de argento tractitio, et in aliquibus partibus et figuris de argento tractitio non deaurato, in quo est imago Salvatoris deaurata cujus vestimenti plicature distincte sunt cum pernis et est in quodam circulo oblongo de argento albo et precedunt due vites cum foliis viridibus et uvis de pernis minutis; que vites quasi extendunt per totum dorsale; super imagine Salvatoris est quedam pars ad modum celi de argento albo tractitio in quo est quedam manus desuper benedicens, iiii cherubini et in medio eorum quedam avis, et a quolibet latere dictorum cherubinatorum sunt ii angeli majores quasi extra celum; in pede Salvatoris est media imago Virginis in quodam throno habens quasdam imagines sanctorum a latere cum libris in manibus; et subtus dictas figuras est imago B. Petri, coram quo est imago domini Gregorii tenentis per manum Palealogum et presentat eum beato Petro reconciliatum, cum litteris grecis et latinis, in provinciis eisdecretis; in circuitu vero dicti panni sunt littere grece et latine, et perne per circuitum dicti panni; et per diademata sanctorum et imaginum et per plicaturas vestium sunt perne; et est dictus pannus foedaratus de xamito rubeo et habet dictus pannus v annulos argenti deaurator a quolibet latere.” This dorsal must have looked not

too is another of Michael VIII's gifts commemorating the Union of the Churches and the alliance formed with the Genoese after 1261.¹⁵⁰ This *pallium*, might in fact be one of the two *pallia* which Manuel Holobolos mentions in his panegyric (*enkomion*) dedicated to Michael VIII, written after 1265.¹⁵¹

unlike the "sakkoi" from the Vatican (1) and Moscow (2), dated by Piltz to the mid-fourteenth and early fifteenth centuries. See, Piltz, *Trois sakkoi byzantins. Analyse iconographique* (Stockholm, 1976), 27-64. The 1338 inventory of Saint Francis in Assisi mentions three panni, which "the emperor of the Greeks sent:" "in primis unus magnus pannus zallus, cum grifonibus et aliis bestiis et avibus de auro. Item unus magnus pannus rubeus, cum vitibus aureis. Item unus pannus rubeus, cum leopardis in rots magnis, totus deauratus. Supradictos tres pannos misit Imperator Grecorum." R. Bonito Fanelli thinks that the emperor in question was John of Brienne, regent for Baldwin II (1229-1237), who visited the church in 1229. See, R. Bonito Farelli, "Tessuti e ricami," in *Il Tesoro della Basilica di San Francesco ad Assisi* (Assisi, 1980), 81. von Wilckens agrees: von Wilckens, "Byzantinische, griechische, sizilische, italienische und andere Stickereien des 12. und 13. Jahrhunderts," in B. Borkopp, B. Schellewald, L. Theis, eds., *Studien zur byzantinischen Kunstgeschichte. Festschrift für Horst Hallensleben zum 65. Geburtstag* (Amsterdam, 1995), 281.

¹⁵⁰ P. Johnstone, "The Byzantine Pallio in the Palazzo Bianco at Genoa," *Gazette des beaux arts* 118 (March, 1976), 99-108. For a full bibliography on the literature of this *pallium* see, C. Hilsdale, "The Imperial Image at the End of Exile. The Byzantine Embroidered Silk in Genoa and the Treaty of Nymphaion (1261)," *DOP* 64 (2010), 152-153.

¹⁵¹ Based on what seem to be intentional omissions in Holobolos, Hilsdale argues that the *pallium* was made shortly before the retake of Constantinople in 1261, but the oration was written sometime after 1265 when the Byzantine-Genoese alliance was shaky. Hilsdale, *ibid.*, especially 194. The descriptions of the two *pallia*, the first noted for its colorful, while the second for its golden embellishments, from Holobolos read: "δὸς

ὡς δυνατόν σεαυτὸν τῇ σῇ πόλει καὶ ἡμετέρα, παρηγόρησον διὰ τοῦτοῦ χαρακτηρὸς πέπλω καὶ γραφαῖς ἐγκειμένου τὸν ταύτης διαπρύσιον ἔρωτα...οὐκ ἐκ χρυσοῦ ἢ τινος ἄλλης πολυτίμου ὕλης ἐσκευασμένον, ἀλλ' ἐκ χρωμάτων κομμωτικῶν. τὴν γὰρ περὶ τὰ τοιαῦτα μακρὰν φιλοτιμίαν τῶ τῶν Ἀσσυρίων ἐκείνων ἀφήκας παίζεσθαι βασιλεῖ. τῷ δ' ἄλλω ἐκ χρυσοῦ πρὸς κλωστήρα τετορευμένον οἱ τοῦ καλλινίκου μάρτυρος Λαυρεντίου καὶ τῶν σὺν αὐτῷ περιφανεῖς ἐνεχαράχθησαν ἀγῶνες καὶ τὰ μέχρι θανάτου διὰ Χριστὸν σκάμματα. ...ὧν ἕκαστον καὶ ἐπιστήμασι δι' Ἰταλικῶν γραμμάτων ἐνεσημαίνετο· οὕτως ἔφερε θαυμασίως ὁ μέγας πάντα πέπλος ἐκεῖνος τὸ ἱερὸν τοῖς γενναίοις ἀνάθημα μάρτυσιν οἰκονομία βασιλικῇ, ὡς ἄρα οὐ πέπλος ὁ πέπλος ἦν, ἀλλὰ βίβλος· καὶ βίβλος οὐ προσταγμάτων θεοῦ τὸ προφητικόν, ἀλλὰ σκαμμάτων νεανικῶν μαρτύρων Χριστοῦ. τί πρὸς τοῦτο τὸ ἔργον ὁ πέπλος ἐκεῖνος, ὃν ἰστούργουν Ἀθηναῖοι τῇ πολιადι τούτων Παλλάδι καὶ τέχνη ποικιλικῇ λαμπροῖς ἐφάρμασσον βάμμασιν, ᾧ μῦθοι τινες καὶ τερατεῖαι ἰστούργητο, γίγαντες βάλλοντες λίθους εἰς οὐρανὸν καὶ βαλλόμενοι." The quotation is from A. Siderides' edition: "Μανουὴλ Ὁλοβώλου Ἐγκώμιον εἰς Μιχαὴλ Η' Παλαιολόγον," *Ἐπετηρὶς Ἐταιρείας Βυζαντινῶν Σπουδῶν* 3 (1926), 188-189. See, Schreiner, "Zwei Denkmäler sur der frühen Paläologenzeit: ein Bildnis Michaels VIII und der genueser Pallio," M. Restle, ed., *Festschrift für Klaus Wessel zum 70. Geburtstag*

Overall, the sheer number of references to Romania, which continue through the fourteenth century, suggest the importance of this region in the silk supply of the West. The identifications and the classifications made by textile specialists seem subject to question. Despite the silence in the museum collections, the western inventories and other references to samites and silks from Romania show that this was one of the most important suppliers in the thirteenth century. In the fourteenth century, Romania was still important, although by then Lucca seems to have become the principal center for quality silks in the possessions of churches, monasteries and royal households which eventually constituted the basis of the prized items preserved in various museums across Europe and North America.

In terms of where in Romania we should look for the greater supply of silken garments, the answer seems to be the Peloponnese and Boiotia, namely, areas that include Thebes and Corinth which since the twelfth century had been the hotspots of high-end cloth production (silk and/or linen) in Byzantium. That said, simply because there is little to no explicit evidence that I am aware of, it is not justified to exclude the possibility of sales/gifts of silks from Epiros, and certainly not from the State of Nicaea. We just cannot qualify the production and exports of silks from these areas, especially

(Munich, 1988), 249-258. The first *pallium* is made of colorful material, the other is a very elaborate *pallium*, embroidered in gold, narrating the life and martyrdom of St. Lawrence in Latin. Schreiner's German translation of Holobolos' passage is on pp. 252-253. My attempt at translating this important text reads: "because with respect to these [the colors of the first *pallium*] you left [ἀφῆκας] the vast lavishness to the King of Assyrians of old to be ridiculed."

from Epiros, since we know less about it. Based on what we know, we can claim that at least eighty percent of the known instances that are mentioned above (10/13) concern the Venetian and French controlled sections of the Peloponnese and Boiotia. If one can risk extrapolating from this data, it may be that over eighty percent of the silks from “Romania” were in fact going West from this part of Romania.

This first foray into a new source of evidence on Byzantine textile production allows me to make two observations. The first is that the area known as Romania continues to be an important silk producer in the fourteenth century, even though it has a stronger presence in the thirteenth century. My second observation is that the area known as Romania loses the first place it held in the thirteenth-century in the western (mostly papal) inventories in the following century to Lucca. The strong presence of Romania in the fourteenth century, however, is quite visible in the contemporary papal inventories. One should add that this conclusion needs to be confirmed by more inventories from the fourteenth century than the ones studied here before it is fully accepted. Nevertheless, our study, based on ca. 2,200 luxury textiles in eight church inventories, shows that the difference between the thirteenth century inventories and the inventories of the fourteenth century are remarkable in terms of the diminishing but still significant amount of references to cloths, or garments that were made in “Romania” in the fourteenth century. Let us reiterate here again the discrepancy

between this observation and the assigned provenances of medieval textiles in contemporary museum holdings that we have studied.

The fact that the high end silk garments or cloths from the non-Western-controlled parts of the Aegean basin were few, does not mean that they were not exported to the West at all, or that they were not being produced locally. The three surviving examples of elaborate cloaks for ecclesiastics (*sakkoi*)—one in the Vatican and two in Moscow--make this case. Unless they were imports, the amazingly rich lampas-*kabbadion* depicted in the *typikon* of the Bebaios Elpidos Monastery in Constantinople founded by Theodora Synadene, niece of Michael VIII, in the 1320s, the portraits of Alexios Apokaukos (d. 1345), emperor John VI Kantakouzenos (1347-1354), Manuel II (1391-1425) and his family, the elite wardrobe defined in the *Ceremonial Book of Pseudo-Kodinos* (1347-1368) all together may attest to the survival of a local luxury textile production.¹⁵² However, it may be deduced from the papal inventories that one of the most important recipients (by gift or purchase) of textiles from Romania in the thirteenth century was receiving or buying less silks from “Romania” in the next century. Counter evidence to this proposition may be found in Francesco Pegolotti’s *La Practica della Mercatura*. Around 1340 he mentions that *bucherams* (fine cloth of cotton and/or linen) from Cyprus and “Erzinca” (modern Erzincan in northeastern Turkey),

¹⁵² Piltz, *Trois sakkoi byzantins*, 27-64; Spatharakis, *Corpus of Dated Illuminated Greek Manuscripts to the Year 1453* 2 vols., (Leiden, 1981), vol. 2, nos. 252, 269, 278; J. Verpaux, *Pseudo-Kodinos. Traité des offices* (Paris, 1976).

panni from Florence, raw silk (*seta cruda*) and boiled silk (*seta cotta*) without naming provenance, Lucchese, Genoese and Frankish silks with silver and gold threads were all sold in Constantinople when he visited the city.¹⁵³ The only set of textile-related items from the Aegean region that he refers to as being sold in the West—in this case in Pisa and Genoa—are madder (“robbia di Romania”), cotton, and leather from Romania.¹⁵⁴ However, he still uses the measure (*braccia*) of Thebes for cloths sold in Clarentza and suggests that Clarentza was the outlet of silks (samites and *bucherams* in Pegolotti’s text) from this region, not Thebes directly.¹⁵⁵ Was southern Greece, under Venetian and French control in the 1340s, the only or the most significant region in Romania that exported silks to the West? Until further evidence to the contrary is found this is the way the documents point.

Because the textile industry grew considerably in western Europe from the thirteenth century on and the Venetians, French, and the crusaders overall had

¹⁵³ The Francesco Datini archive (1363-1410) does not contain any documents pertaining to Romania. http://www.istitutodatini.it/schede/archivio/home_e.htm (Accessed 7.8.2012).

¹⁵⁴ A. Evans, ed., *Francesco Balducci Pegolotti, La Pratica della Mercatura* (Cambridge, 1936), 35-38 (for Constantinople), 208 (Pisa), 215 (cotton in Genoa). He does not mention cities from Thessaly or Macedonia, hence, gives no evidence on what was sold, for example, on the market in Thessalonike. Yet, for Thebes, it is significant that he mentions nothing other than pepper that came from India. *Ibid.*, 119. About a hundred years later Giacomo Badoer’s account book refers only to textiles (*panni*) from Flanders, Cologne, Florence; scarlets, Turkish cloths and “fostagni de Cremona.” See, U. Dorini and T. Bertele, eds. *Il Libro dei Conti di Giacomo Badoer* (Rome, 1956), 20, 23-25, 28.

¹⁵⁵ Pegolotti, 117-118 (Samites and *bucherams* were sold in Clarentza and Thebes is the first location where conversion rates are given for: “Canne 1 di Chiarenza fae a Stiva braccia 3 ½”) and 119 (for “braccia di Stiva”).

immediate access to both the raw materials and finished products of the Middle and the Near East, and also because the former hotspots of Byzantine textile production were now in Venetian and French hands, it is likely that the surviving Byzantine textile industry faced even fiercer competition in the thirteenth century than formerly. This was a significant change from the previous century when, according to the Byzantine sources, only the high-end eastern, Spanish and perhaps Sicilian silks were making their way into Byzantium. As we will see in the next chapter, from the late-thirteenth-century on not only the luxury silks of western European origin but luxury woolen garments like the scarlets and the stanforts were also making their way into the Nicaean state and possibly also the Epirote state. The fact that very few Western sources, including the papal inventories, Pegolotti, Marco Polo, and Badoer specifically mention Greek/Byzantine textiles from the fourteenth century and later, is firm evidence that the Greek/Byzantine exports from within Romania tapered down in the fourteenth century.¹⁵⁶ Because in the twelfth and the first half of the thirteenth century Greek/Byzantine textile exports into Europe were limited to silks, and since the pioneering Italian silk producers Venice, Genoa, Bologna, and Lucca scaled up and organized their silk textile production from the middle of the thirteenth century, I

¹⁵⁶ The penultimate reference to a Theban cloth after the inventory of the French kings from 1317 L. Douet, *Nouveau recueil de comptes de l'argenterie des rois de France* (Paris, 1874). The later inventories from 1327 and 1348 only mention Lucca, Cyprus, Tartary and England. For the reference to "samis d'estive," see *ibid.*, 1 and 17. The latest inventory, dating from 1387, that mentions Thebes and Romania studied here was written for and under the rule of Charles V of France. Labarte, *Inventaire du mobilier de Charles V, Roi de France*, 140-141, 368, 374.

would argue that ca. 1250 marks the beginning of the end for the surviving Greek/Byzantine silk textile industry, in particular, its capacity to export. Thereafter, the Italian producers were interested mainly in the raw materials that Asia Minor and Greece provided, even though areas under Turkish control continued to sell their finished textiles to European buyers.

As we will discuss in the next chapter, the 1250s mark the turning point for Byzantine exports, since Lucca, Bologna, Venice, and Genoa had become active suppliers of high-end textiles by then, and technologically were becoming more proficient than Byzantium. Textual evidence on Byzantine textile exports into the West allows us to argue that Byzantine cloth exports to the West, to the degree that the term Romania included the Nicaean State, diminished after ca. 1250. By the first quarter of the fourteenth century most textile-producing Nicaean cities, except for Philadelphia, were lost to the Turks. Byzantine textile exports to the West became increasingly difficult also because by 1250 Italy and Spain made their own luxury textiles and the western markets had immediate access to the textiles of the Middle and the Near East.

I am not aware of any Western source that mentions or implies the importation of Byzantine silks from Byzantine-controlled Romania to the West in the fourteenth, and the fifteenth century in particular, similar to those from the twelfth, and possibly, the thirteenth centuries. It seems that the silk thread that connected legendary

Constantinople and Byzantium to medieval France, England and Spain in popular imagination was cut off sometime around the middle of the thirteenth century.¹⁵⁷ Further work on Western literature in the fourteenth and the fifteenth centuries may clarify whether popular imagination in the West continued to associate Byzantium with silks as they did in the past.

That the Byzantine textile exports from Byzantine Romania to the West diminished after ca. 1250 is the argument of this chapter. Both Byzantine and foreign written evidence show that textile production and possibly also raw material production (raw silk) were concentrated in southern Greece, Thessaly and the capital in the twelfth century before 1204. The evidence we have examined indicated that sometime after the middle of the thirteenth century ex-Byzantine Greek successor states (and by that I mean Nicaea, in particular) likely stopped exporting finished textiles to the West and became an exporter mainly of raw materials. For what happened in western Asia Minor in terms of textile production during the thirteenth century and to the Byzantine State after the thirteenth century on, one has to turn to a detailed analysis of written evidence from the State of Nicaea. Thus, textile production in Byzantium and textile import trends into Byzantium during and after the thirteenth century is what we will focus on in the next chapter.

¹⁵⁷ J. Burns, *Sea of Silk. A Textile Geography of Women's Work in Medieval French Literature* (Philadelphia, 2009), 165-167.

CHAPTER 10

Textile Production in the Successor States and the Changing Textile Import Trends into Byzantium ca. 1100-1400

Regardless of what period in our assessment marks a turning point in Byzantine textile production and export trends in the thirteenth century—whether it is the middle or the end of the thirteenth century—it is certain that in terms of textile production, significant changes occurred between the twelfth and the thirteenth centuries concerning where most of the textile production in “Romania” was done. During the twelfth century, Boiotia and the Peloponnese emerged as important producers of both of silk and silk cloths in addition to the capital, while after 1204 western Asia Minor also began producing luxury silk cloths. We will look mainly at the evidence from the states of Epiros and Nicaea in this chapter; the evidence from Trebizond, which largely remained outside of Romania, is not included.¹⁵⁸ In the

¹⁵⁸ There is a little evidence on silk or linen production in the Empire of Trebizond but not enough to draw any conclusions on production, import and export trends. There is little doubt that geographically the region occupied a strategic location and had direct access to both the eastern and western products. Heyd II, 94-95 still offers the best overview on trade in Trebizond in general. Both Heyd and Karpov (Karpov’s argument is based on Heyd’s) argue that there was wool, linen and silk production in Trebizond which in turn is based on a single passage in Eugenikos’ history of Trebizond written in the fourteenth century. S. P. Karpov *L’Impero di Trebisonda Venezia Genova e Roma 1204-1461* (Rome, 1986), 38. W. Miller, *Trebizond. The Last Greek Empire* (Amsterdam, 1968) is very useful but contains nothing specific on textiles. Jacoby, leaning on the negative, also writes that there is not enough evidence to argue that Trebizond was producing textiles, especially silks. D. Jacoby, “Late Byzantium between the Mediterranean and Asia: Trade and Material Culture,” in Sarah T. Brooks, ed., *Byzantium: Faith and Power (1261-1557). Perspectives on Late Byzantine Art and Culture* (New York, 2007), 24. I think that it is quite possible that Trebizond was producing textiles (unless the ceremonial dresses on Alexios III and Theodora of Trebizond (1374) were not woven in Trebizond for example) but that there is not evidence that I am aware to argue that these were exported, and if so at what rate. See, Spatharakis, *Corpus of Dated Illuminated Greek Manuscripts*, vol. 2., pl. 278. On the “rest of Romania,” see especially Jacoby, “The

previous chapter, I set out to describe the main nodes of silk production up until 1200 and I showed that Romania was still an important exporter of silks to the West up until the fourteenth century, to judge at least by the Western inventories. I have argued in the previous chapter that most of the exports (at least eighty percent) to the West after 1200 may have come from southern Greece. This chapter will focus on textile production after 1200 in the successor states of Nicaea and Epiros analyzing the evidence on where silk production was done. The previous chapter focused on exports, this chapter will, in contrast, focus on luxury textile imports into the Greek successor states, Nicaea primarily, and Epiros, secondarily.

I will attempt to clarify the history of the silk textile sector of the late Byzantine economy in two main ways. The scope of this chapter is to offer the most detailed analysis to date of the Byzantine evidence on textiles and raw materials from the thirteenth to roughly the end of the fourteenth century, although part of the conclusion will pertain to the period up the fifteenth century. In the previous chapter, I analyzed the beginnings of luxury silk textile production outside of the capital in Boiotia and the Peloponnese; now, I will shift the focus from the Peloponnese to western Asia Minor. When the latter was lost to the Turks in the thirteenth century, the only area under

Production of Silk Textiles in Latin Greece," *Commercial Exchange across the Mediterranean* XII (repr. London, 2005), 22-24, where he argues for a steady decline in the textile industry because of brutal competition. On Constantinople after 1204 see Jacoby, "The Economy of Latin Constantinople, 1204-1261," in A. Laiou, ed., *Urbs Capta La IVe Croisade et ses consequences* (Paris, 2005), 197-199.

Greek/Byzantine control still producing textiles and raw materials remained Macedonia, with Thessalonike at its head.

We know a good deal about the fate of the twelfth-century silk and silk textile production sites like Thebes and Corinth after they were occupied by the French crusaders. We have evidence on raw silk and some direct evidence on exportation of silk cloths from southern Greece in the thirteenth century and after.¹⁵⁹ There is evidence that at least raw silk production either revived or continued in Patras, Modon and Coron, and that cotton was sold in Clarentza in the late thirteenth and early fourteenth centuries.¹⁶⁰ We are better informed about the production and export trends from Thebes, Corinth or the Peloponnese in general, and that the upward trend in exports continued at least until the end of the fourteenth century, but perhaps not thereafter, because there is no reference to Theban textiles in European documents after 1387 that I am aware of.¹⁶¹ Based on what has been discussed in the previous chapter, I assume that in southern Greece, silk and silk cloth production retained its competitive edge in the course of the thirteenth century but lost its first place to Lucca in the fourteenth century.

As we have seen, there are significant quantities of vestments from “Romania” in thirteenth- and fourteenth-century Western inventories. All together Epiros, Nicaea and

¹⁵⁹ Pegolotti, 119; Douet (Thebes), 17, 29-32, 48, 70-71, 81, ff; R. Ciasca, 419-20.

¹⁶⁰ See below Part 3, n. 297.

¹⁶¹ Douet, *Nouveau recueil de comptes de l'argenterie des rois de France*, 1, 17.

the Latin Empire of Constantinople should to be included as possible producers of silks and suppliers of the demand for silks that are mentioned in the inventories and wills that we have studied in the previous chapter. In this chapter, however, the focus is primarily on Nicaea, and secondarily, on Epiros. The Latin Empire is excluded simply because I am not aware of any evidence on silk textile production there or imports to it.

As we will see below, there is enough cumulative evidence, even though indirect and sometimes tentative, that silk was commercially woven in the Greek successor states and in northern Greece. What is most significant in this regard is that, during the thirteenth century, for the first time in Byzantine history, alongside the high-end textiles from Egypt and Syria, we hear more of Italian/Latin textiles, being imported into Nicaea and Epiros. I argue in this chapter, first, that Nicaea was indeed producing silks and raw silks that it could *potentially* export. The influx of western luxury textiles into Romania began in the thirteenth century and it eventually, after the second half of the thirteenth century, likely caused a decline in the export capacity of Byzantine luxury textiles. When western Asia Minor was lost to the Turks in the course of the late thirteenth and early fourteenth century, the only area under Byzantine/Greek control still producing textiles and raw materials remained northern Greece with Thessalonike at its head; yet I am not aware of any evidence showing that Thessalonike exported textiles to the West.

In short, this chapter casts a critical eye on the last century when Nicaea potentially may have been exporting luxury textiles to the West, and when Nicaea began importing from the West significantly for the very first time. The chapter also provides a close account of a new phase in western industrial history and the rise of the early modern global economy, written from the perspective of a Byzantium that eventually—by the fifteenth century—completely lost its capacity to export luxury textiles to the West, a capacity it still retained during the first half of the thirteenth century. This chapter, in other words, allows us to look at the earliest beginnings of the influx of Western luxury textiles into the Greek successor states.

Before we begin, here is a quick overview of where the current work stands in textile history of the later Byzantine period. From the perspective of textile history the thirteenth century is not a well-scrutinized period, perhaps because it can be “read” in many ways, as is often the case for most eras of intensified transformation. Both Lopez in his article published in 1945 and Muthesius in 2003 argue that Byzantine silk exports to the West largely came to a halt in 1204, even though there is some evidence of continuity thereafter.¹⁶² Jacoby has contributed the most toward a systematic evaluation of the textile market of the twelfth and thirteenth centuries, and he argues mainly that

¹⁶² R. Lopez, “Silk Industry in the Byzantine Empire” *Speculum* 20. 1(1945), 1-42; A. Muthesius, “Silk in the Medieval World,” D. Jenkins, ed., *The Cambridge History of Western Textiles* (Cambridge, 2003), vol. 1, 325. Muthesius does not comment on the post-1204 evidence, which she admits exists, but leaves its analysis to Jacoby in a more recent article: Muthesius, “Textiles and Dress in Byzantium,” 163-164.

silk production in the formerly Byzantine lands declined after ca. 1250.¹⁶³ Regarding the post-thirteenth-century evidence, Matschke argues that the textile industry in Byzantium as a whole (silks and non-silk products together) continued to exist and to serve the local market up until the fifteenth century, when the local industry collapsed completely because of competition from imports of foreign textiles.¹⁶⁴ Matschke, however, does not discuss in detail the influx of foreign textiles into Byzantium, when they began, and the overall import trends; his main focus is on textiles produced in Thessalonike. In short, apart from Jacoby, the scholarly opinion is that there is no worthwhile textile in the Greek successor states after 1204, except for the little pocket in Thessalonike that seems to have still served the local demand in the fourteenth century.

There are two important difficulties in providing a systematic evaluation of late Byzantine textile production and import and exports trends between 1200 and 1300. The first is that most of what we know concerns only the luxury products within the textile industry, especially the silks. For textiles outside of the silks there is very little information and most of it is indirect. I was able to identify most of it thanks to the *Thesaurus Linguae Graecae* (TLG).¹⁶⁵ The second problem is temporal. Apart from

¹⁶³ He clearly argues this in his "The Production of Silk Textiles in Latin Greece," *Commercial Exchange across the Mediterranean XII* (repr. London, 2005), 22-24.

¹⁶⁴ Matschke, "Tuchproduktion und Tuchproduzenten in Thessalonike und in anderen Städten und Regionen der späten Byzanz," *Byzantiaka* 9 (1989), 51-52.

¹⁶⁵ The *Thesaurus Linguae Graecae* is a digital library that includes sources written in Greek from the eighth century B.C. to the sixteenth century. The database allows controlled keyword searches, which I have

Matschke and Jacoby, to my knowledge, no other historian has studied the Byzantine textile industry after 1204 in a focused manner. This scholarly neglect reflects, both the assumption that the Byzantine economy lost its twelfth-century vitality in the thirteenth century, and the challenges of working with the complicated sources produced in the highly variegated, multi-lingual, and complex political environment of the post-twelfth-century Aegean.

That said, some valuable light has been shed on the fate of post-1204 Byzantine textile industry, especially by Jennifer Ball and Maria Parani, building on the important contributions to Middle- to Late-Byzantine ceremonial (both ecclesiastical and imperial) dress by Elizabeth Piltz from the 1970s and the 1990s.¹⁶⁶ Without going into detail Jennifer Ball notes that the late Byzantine secular dress exhibits greater contact with the West, especially with Italy.¹⁶⁷ Ball writes that the late Byzantine period is also marked by the appearance of “gendered clothing” (the distinction between men and women’s clothing was not apparent previously), which she again attributes to Western influence.¹⁶⁸ Parani studies Byzantine material culture with significant attention to the

used at the initial stages of my research on Byzantine textiles, to identify the first appearance, continued use and frequency of certain textile terms.

¹⁶⁶ E. Piltz, *Trois sakkoï byzantins. Analyse iconographique* (Stockholm, 1976); *eadem*, *Le costume officiel des dignitaires byzantins à l’époque Paléologue* (Uppsala, 1994).

¹⁶⁷ J. Ball, *Byzantine Dress. Representations of Secular Dress in Eighth to Twelfth Century Paintings* (New York, 2005), 6.

¹⁶⁸ Ball, “Byzantine Clothing,” ed. J. Condra, *The Greenwood Encyclopedia of Clothing through World History* vol. 1 (Westport and London, 2008), 138-139.

study of historical textiles and jewelry, their definition, identification and historical context.¹⁶⁹ Last but not at all the least is Phaidon Koukoules's still useful *omnium gatherum* about Byzantine daily life which offers a good starting point.¹⁷⁰ The present work, unlike the others preceding it, attempts to trace via borrowed textile terms in Byzantine inventories the change from an import market dominated by Eastern luxury textiles to a market increasingly dominated by Western luxury goods in the thirteenth century. Although many scholars have promised to study this change nobody has actually done it—that is, until now.

In terms of their overall scope and use, the depth of local and western evidence on Byzantium from the thirteenth and fourteenth centuries, David Jacoby's works remain unsurpassed. Still, it is possible to contribute some new evidence about textile identifications, as I will show below in my discussion of the inventories and other primary sources. Among them the loan words for textiles in particular shed important light especially on the shifting geographical focus of imports into Byzantium. These came from mainly the East in the twelfth century; they still came from the East, but also in growing proportions from the West for the first time in the thirteenth.

¹⁶⁹ M. Parani, *Reconstructing the Reality of Images. Byzantine Material Culture and Religious Iconography (11th-15th centuries)*, (Leiden, 2003); *eadem*, "Intercultural Exchange in the Field of Material Culture in the Eastern Mediterranean: The Evidence of Byzantine Legal Documents (11th to 15th Centuries)," A. D. Beihammer, M.G. Parani, C.D. Schabel, eds., *Diplomatics in the Eastern Mediterranean 1000-1500* (Leiden, 2008), 348-372; *eadem*, "Byzantine Jewellery: The Evidence from Byzantine Legal Documents," in C. Entwistle and N. Adams, eds., *Intelligible Beauty. Research on Byzantine Jewellery* (Oxford, 2010), 186-192.

¹⁷⁰ Ph. Koukoules, *Βυζαντινών βίος και πολιτισμός* (Athens, 1948), vol. 2. 2, 5-59.

Tracing imports through loan words is not without its problems. Not all foreign textile words in a host language constitute evidence that the textiles in question were imported there. The common classical heritage of both Byzantium and the West cautions us against jumping to quick conclusions. For example, the use of the Celtic term *sagum* (from *sagion*, a type of cloak) in Frankish courts in the ninth century owes this occurrence to common heritage.¹⁷¹ The use of the Latin word *pallium* (also, a type liturgical cloak or mantle that symbolized the authority of the papacy in the West) in Byzantine texts of the thirteenth century is by no means an indication that western *pallia* were being imported to Byzantium then. On the contrary, *pallium* is another mark of this common heritage as the word is attested in Greek as early as the second century and remained in use thereafter.¹⁷² Nevertheless, following John Wild's previously mentioned cautionary statement, I have focused on words that are attested for the first time in a specific century based on the sources available in the TLG database.¹⁷³ This method, although not infallible, because the database itself does not contain all of the surviving Greek texts, and because all of the surviving Greek texts are only a portion of

¹⁷¹ McCormick, "Byzantium's Role in the Formation of Early Medieval Civilization: Approaches and Problems," *Illinois Classical Studies* 12 (1987), 214-215.

¹⁷² According to the TLG the first use of the word is in the second century apocryphal acts of John. M. Bonnet, *Acta apostolorum apocrypha*, (repr. Hildesheim, 1972), vol. 2.1, 155-156, sections 5 and 6. It is used more intensively from the fourth century on as it appears in authors such as John Chrysostom, John Moschus, Hesychios, John of Damascus, among others.

¹⁷³ "A loan word often-but not invariably-implies a borrowed object, technique or concept." See, Part 3, n. 11 above.

what actually existed, is the closest to the truth one can get given the present state of our knowledge.

Textile Imports into Byzantium ca. 1100-1400

The importation of foreign textiles and raw materials into Byzantium has a long history, going back to the imports of eastern, presumably Chinese, silk into the Roman Empire. One is tempted to view the imports in this longer context. We know that the imports from the East were not limited to silks but included linen products and flax as well. Judging from the references in al-Mukaddasi (late tenth century), Nāser-e Khosraw (eleventh century) and several documents from the Geniza (ca. 1066), Durak concluded that the Byzantines were importing flax from Egypt and linen possibly from Muslim Sicily in the eleventh, and likely in the twelfth century, even though no specific references are known from that century.¹⁷⁴ The *Book of the Eparch* mentions Bulgarian linen and unnamed “other regions” from which linen was brought into Constantinople to be woven into either linen cloth or garment.¹⁷⁵ The importation of raw materials into Constantinople, references to the Byzantine exports of luxury textiles which we will see in more detail below, as well as the evidence on locally manufactured silken and linen

¹⁷⁴ K. Durak, “Commerce and Networks of Exchange between the Byzantine Empire and the Islamic Near East from the Early Ninth Century to the Arrival of the Crusaders” (Unpublished Ph.D. Dissertation, Harvard University, 2008), 107-114.

¹⁷⁵ *Eparhenbuch*, 9.6 (Bulgarian linen) and 9.1 which among other articles demonstrates best that linen woven in the Strymon region and Kerasos (mod. Giresun) was sold to the vestioprates who made garments out of these fine linen cloths. Flax was also used in candle-making.

textiles all together imply that luxury textile production was alive and well in the Byzantine capital in the tenth and eleventh centuries. Then, sometime between the tenth and the twelfth century, sites mainly from southern Greece (as well as Thessalonike according to Benjamin of Tudela) formed an alternative to the textile industry in Constantinople. Like its Constantinopolitan counterpart, this provincial textile industry too was not limited to silks. For example, Niketas Choniates mentions linen cloth production in Corinth and Thebes: elsewhere, without specifying these two cities, he talks of “lowborn” rich linen merchants who became senators (*sebastoi*¹⁷⁶), a novelty under Alexios III which the author saw as a sign of decline.¹⁷⁷ The emergence of newly rich linen merchants may indicate that the linen industry at the time was producing more linen cloths and thus consuming sufficient or even more raw materials, thereby allowing the linen merchants to prosper. If this was indeed the case, then, one may conjecture that the increase in linen cloth output was perhaps related to the emergence of new production centers in central and southern Greece. There are many other instances dating from the eleventh and twelfth centuries where linen cloths and

¹⁷⁶ *Historia*, 484, lines 1-5. It was a very distinct title given to the highest of the aristocracy. It is likely that the said rich linen merchants paid significant amounts of money to purchase the title. I would like to thank Prof. Angelov for this observation. In the same paragraph, Choniates explains that the Cumans and the Syrians could pay for the same title of *sebastos*, which was a way for these merchants to earn annual salary (*roga*) from the state, a practice continued from the eleventh century when salaries were given to foreigners for the first time. Purchasing titles was an investment on the parts of the wealthy. Each title had a different, negotiable price. See P. Lemerle, “Roga et rente d’état au Xe-XIe siècles,” *REB* 25 (1967), 77-100, especially, 83-84, 88. I would like to thank Prof. McCormick for this reference.

¹⁷⁷ The reference to linen merchants is in N. Choniates, *Historia*, 484, lines 1-5.

clothing are mentioned which do not give any specific provenance for either the linen or the linen cloth/garment.¹⁷⁸ This may encourage the overall impression that up to and including the twelfth century, the Byzantine Empire produced its own linen cloths (both luxury and non-luxury),¹⁷⁹ mainly in the capital and then certainly in the twelfth century, also in Boiotia and the Peloponnese perhaps in addition to other areas which we are not informed about. If the empire did indeed import luxury linen items, it is likely that these imports came mainly from the same region as the high-end silks did in the tenth and eleventh centuries, namely Egypt and Syria. Good quality linen was, like silk, a luxury item as one might deduce from Niketas Stethatos' eleventh-century reference to "fine linen" (βύσσος) alongside other signs of imperial elegance such as the scepter and diadem.¹⁸⁰

¹⁷⁸ To name a few of these references, see I. Bekker, *Michaelis Attaliothae historia* (Bonn, 1853), 311 line 6; Kedrenos in I. Bekker, ed., *Georgius Cedrenus Ioannis Scylitzae ope* (Bonn, 1838-1839), Vol. 2, 614, line 18; I. Bekker, ed., *Georgius Cedrenus Ioannis Scylitzae ope* (Bonn, 1838-1839) vol. 2, "Michael VI," section 2, line 11; Th. Gaisford, ed., *Etymologicum Magnum* (repr. Amsterdam, 1967), 209, line 35 (Kalasiris, an Egyptian *chiton* made of linen). This garment is mentioned in the thirteenth century lexikon for the last time: Pseudo-Zonaras in J. A. H. Tittmann, ed., *Iohannis Zonarae lexicon ex tribus codicibus manuscriptis* (repr. Amsterdam, 1967), vol. 2, 1143. Also see the references to fine linen (*bussos*) in Theodoros Prodromos, W. Hörandner, ed. *Carmina historica* (Vienna, 1974), poems 74 and 79.

¹⁷⁹ As non-luxury linen we should name the reference in *Hodoiporikon* to λινοροῦντες that Trapp translates as [fish?] net-makers. Trapp, vol. 5, 941; C. Horna, "Das Hodoiporikon des Konstantin Manasses," *BZ* 13 (1904), 325-347 (1. 254). One should also mention the reference in the twelfth century *vita* of Cyril Phileotes by Nicholas Kataskapenos (BHG 468. Nicholas died after 1147), in which the saint warns against combining linen with wool when weaving, as anything other than the roughest of wool is considered appropriate for a godly man or woman: "Οὐ συνυφανεῖς ἐρεῶ ἱματίῳ λινούν, οὐδὲ πάλιν λινῶ ἐρεοῦν." See, É. Sargologos, *La Vie de Saint Cyrille le Philéote moine byzantin* (Brussels, 1964), 46. 13.

¹⁸⁰ J. Darrouzès, *Nicetas Stethatos, Opusculs et Lettres* (Paris, 1961), Oration 3, ch. 33, line 3: "Φαμέν δὲ ὅτι, ὥσπερ ἀπὸ τῶν ἑξωθεν παρασήμων, τοῦ διαδήματος, φημί, τῆς ἀλουργίδος καὶ τῶν σκήπτρων καὶ τοῦ βυσσίνου, γνώριμός ἐστι τοῖς ὁρώσιν ὁ βασιλεὺς καὶ οὐκ ἀπὸ μόνης τῆς κλήσεως, οὕτω καὶ ἀπὸ

For woolen cloth, on the other hand, one could look north to Bulgaria or the Slavic populations. It is not clear that at the time of the writing of *The Book of the Eparch*, the earliest attested Byzantine source (early tenth century) which mentions that *sthlabinikon*, a “Slavic cloth” or “Slavic garment,” was imported, yet it is also certain that it was being produced in Constantinople by the *serikarioi* (silk weavers and tailors), which does not necessarily mean that such a textile was made of silk.¹⁸¹ In fact the *Life* of St. Lazaros seems to imply that this was quite a humble woolen garment in the eleventh century, at least if it were, as in this case, woven from goat hair.¹⁸² The twelfth-century poet Ptochoprodromos, again, suggested that it was a common item of clothing as he himself, who claims to be dirt poor, wore it.¹⁸³ In any case, the evidence suggests that

τοῦ πλείονος τῆς χύσεως τῆς σοφίας καὶ τῆς γνώσεως τῶν μυστηρίων...” Also see Theodore Prodromos’ twelfth-century reference to linen next to gold, pearl and silk: M. Marcovich, *Theodori Prodromi de Rhodanthes et Dosiclis amoribus libri ix* (Stuttgart, 1992), Book 4, line 271: “σοὶ τῶν μετάλλων ἢ πολύχρυσος χάρις/ σοὶ τῶν διαυγῶν μαργάρων ἢ στιλπνότης/ σοὶ νῆμα Σηρῶν, σοὶ λινόκλωστον φάρος/ σοὶ πᾶν ὑπουργεῖ, σὲ τρέμει πᾶσα κτίσις / Ἥλιε, διφρεῦ ἄρματος πυροτρόχου.” We do not know the status of Byzantine exports or imports of linen to the degree that we know of silk. The fact that garments and cloths were sometimes woven of combined linen and silk complicates the matter and we do not know what proportion of the known silk imports and exports were made of pure silk. No work specifically on surviving Byzantine linen exists that is similar to Muthesius’ work on Byzantine silks.

¹⁸¹ Trapp, vol. 7, 1546, 1569. The *serikarioi* were allowed to manufacture the *sthlabinika*. *Eparchenbuch*, 8. 1.

¹⁸² “Μιᾶ γὰρ τῶν νυκτῶν ἐξελθὼν ἐκ τῆς αὐτοῦ κέλλης, ὁρᾷ τινα γέροντα φοροῦντα ἐξαίγων ἐρίου χιτῶνα ὑφασμένον, ὅπερ σθλαβινικὸν καλεῖν σύνηθες, καὶ ἐπὶ τῶν ἑαυτοῦ ὤμων δεσμὸν ξύλων βαστάζοντα καὶ ἔμπροσθεν αὐτοῦ ἐστῶτα.” H. Delehaye, *Acta Sanctorum Novembris* (Brussels, 1910), vol. 3, 524. The fact that the author specifies that the garment was a type of gown (*chiton*) woven of goat hair commonly called *sthlabinikon*, may suggest that goat hair was used regularly as raw material for this item.

¹⁸³ H. Eideneier, ed., *Ptochoprodromos. Einführung, kritische Ausgabe, deutsche Übersetzung, Glossar* (Cologne, 1991), poem 1, line 246.

this woolen (?) garment was not necessarily imported into Byzantium. To the contrary, at the very least the evidence in the *Book of the Eparch* and the *Life* of St. Lazaros suggest that it was produced locally and that it was a type of garment rather than a cloth. The cost of transport in itself suggests that if woolen cloths/garments were imported, they likely were of the high-end types whose value would justify that expense. To support this view one could turn to Tzetzes' statement in the twelfth century that Spain and the Caucasus were the manufacturers of the best woolen items of his time.¹⁸⁴ Tzetzes' statement underscores that it was these types of valuable wools rather than cheaper wools that were imported into Byzantium. I am aware of neither explicit nor implicit evidence that points to the importation of cheaper wools in the twelfth and thirteenth centuries.

Luxury woolen clothing from Italy is first mentioned in a fourteenth-century source,¹⁸⁵ that is, excluding the clearly ironic reference in N. Choniates regarding Alexios IV's (1203-1204) simple wool Latin headdress which his Western "conspirators" placed on his head in place of the appropriate, elaborate Byzantine diadem, i.e. a type of

¹⁸⁴ *Chiliades*, 11. 832-838.

¹⁸⁵ Gregoras 2, 600. "Τῶν δὴ τοιούτων ἐπὶ τοιαύτῃ καταστάσει συνενεχθέντων, τὴν ταχίστην αὐθις ἐξήει τοῦ ἄστεος ὁ Καντακουζηνός, σὺν πολλῇ τῶν οἰκοθεν χρημάτων παρασκευῇ καὶ ὅσα πρὸς δωρεὰς φιλοτίμους τῶν προσιέναι μελλόντων αὐτῷ παντοδαπῶν ἐθνῶν ὁμοῦ καὶ πρεσβευτῶν καὶ πόλεων παρεσκεύαστο· ἐπιπλά φημι καὶ χλαῖνας Ἰταλικὰς ἐξ ἐρίου, καὶ ὅσα ἕτερα μακρὸν τὸ φιλότιμον ἔχουσι τῶν χαρίτων." The woolen χλαῖνα (upper-garment, worn over the χιτῶν) mentioned in the text, because they were meant to serve as political gifts should still be considered luxury, even though they were of wool.

crown.¹⁸⁶ In this specific context, the association in Choniates is, of course, with Alexios IV's reliance on German and Italian support to gain the Byzantine crown from his uncle and his travels to the West to gain military support to accomplish that, which led to the Fourth Crusade.¹⁸⁷

In contrast, it is possible to argue that the Empire was importing silken and/or high-end textiles from Egypt especially, and Syria, already during the eleventh century. For instance, the famous judge and senator Michael Attaleiates, who resided and held properties in both Constantinople and Raideustos (modern Tekirdağ), in his will twice mentions "Saracen cloth," one described as "embroidered" (without any other indication of the cloth's material), the other made of plain silk.¹⁸⁸ According to Durak, both the noun and the adjective forms of "Saracen," in Byzantine usage, refer

¹⁸⁶ Choniates, *Historia*, 557. "οἱ δὲ συμπαίγμονες ἐκείνῳ τὸ τῆς κεφαλῆς ἀφαιροῦντες διάδημα, χρυσόκολλον ὃν καὶ λιθόστρωτον, αὐτοὶ μὲν ἐκεῖνο περιετίθεντο, τὸν δ' Ἀλέξιον περιέβαλλον τὸ λαχνῆεν καὶ ἔρεοῦν καὶ τῆς Λατινικῆς ταλασίας κάλυμμα." Magoulias translates "συμπαίγμονες" as "playmates." However, συμπαίγμός can better be translated as "conspirators" here. I would like to thank Prof. McCormick for pointing this out. This is the only instance, according to the TLG database before the fourteenth century, which could have been interpreted as wool imports from Italy into Byzantium, however, the reference is to the wretchedness and the cheapness of wool and hence its association with the Latin-weave [head] cover. The "diadema" referred to a belt in the fourteenth century. See, Parani, *Reconstructing the Reality of Images*, 22-24.

¹⁸⁷ For further discussion of this text see Part 3, n. 194 below.

¹⁸⁸ Attaleiates, *Diataxis*, 6, 1781-82. "Ἐτερον βλαττίον ἐνδυτόν. Πανίον σαρακηνικὸν ἐξέμπλωτον..." (these are two separate entries in the will) and "Ποτηροκαλύμματα ζυγαὶ β', ἡ μὲν μία ἀπὸ βλαττίου καστρίσιον καὶ μέσον σταυροῦς χρυσοῦς, ἡ δὲ ἕτερον ἀπὸ βλαττίου σαρακηνικοῦ πανίου..." *Ibid.*, 6, 1794. The latter refers to a pair of chalice covers made out of "Saracen" silk cloth. These are the only two references to "Saracen" textiles in Attaleiates' will. He does not use this adjective to refer to clothes or other items elsewhere in his other works.

specifically to the Arabs.¹⁸⁹ We cannot, in addition, exclude here the possibility that by Saracen cloth the author means Saracen-style cloth made in Byzantium. Even if the latter is the case, this reference from Attaleiates still underscores the high-status and availability of Saracen-made or Saracen-style textiles among eleventh-century elite circles. That these imported silken items are mentioned in a high official's will, alongside estates, sacred vessels, icons and books make their extraordinary value clear. In any case, it is clear that in the twelfth-century, luxury textile trade with Egypt and Syria continued. It is evident that these imports were consumed only by the topmost echelons of the society as they are always brought up in contexts that involve members of the court—either the emperor himself or a court aristocrat. For example, Nikephoros Bryennios mentions that Emperor Isaac Komnenos brought his “gullible” brother, emperor Alexios I, Syrian garments when returning from Antioch, which he knew Alexios admired a lot.¹⁹⁰ We have mentioned the importation of *harir* (the Arabic word for silk) into Constantinople in the tenth-century *Book of the Eparch*, so the luxury garment trade coming into Byzantium from Syria had a much longer past.¹⁹¹ A recent

¹⁸⁹ Durak, “The Location of Syria in Byzantine Writing: One Question, Many Answers,” *JTS* 36 (2011), 55.

¹⁹⁰ “Ἐν τούτῳ δ’ ἐπανῆκεν ἐκ τῆς Ἀντιοχείων καὶ ὁ τούτου ὁμαίμων ὁ Κομνηνὸς Ἰσαάκιος, ὃς τὴν βασιλέως ἀπλότητα διαγνοὺς καὶ ὡς χάριν <ἔχει> τῶν ἐκ Συρίας ὑφασμάτων, συχνάκις τοιαυτὰ δίδους τοσοῦτον τὴν βασιλέως ἐπεσπάσατο εὐνοίαν ὥς καὶ κτήσεων κατακυριεῦσαι πολλῶν καὶ σεβαστὸν ἀποδειχθῆναι διὰ χρόνου βραχείος καιοῖκίαν ἐν βασιλείῳ λαβεῖν ἐπὶ τὸ προσμένειν.” P. Gautier, ed., *Nicéphore Bryennios. Histoire* (Brussels, 1975), 4, 29, 298. Alexios I created the title *sebastokrator* for Isaac, his older brother, whom Anna Komnena refers to as “emperor without the purple.” See C. Brand, “Komnenos, Isaac,” in the on-line *ODB* (accessed 7.11.2011).

¹⁹¹ See Part 3, n. 22.

study on the assigned meaning and geographical extent of “Syria,” in which the author gleans the Byzantine sources from the eighth to the eleventh century, shows that the term refers specifically to “Greater Syria” which comprises the modern states of Syria and Iraq.¹⁹² The Byzantines used distinctly separate terms when referring to their eastern neighbors and they understandably tended not to confuse or lump together either different regions or different ethnic groups to their immediate east. This attests to their familiarity with the peoples and imported luxury goods of the East.

The influx of Italian finished luxury textiles into Byzantium does not pre-date the thirteenth century, unlike those of the Syrian and Egyptian luxury textiles. Gregoras, for example, referring to the reign of John III (1221-1254), is the first author to explicitly mention Italian luxury textiles imported into the Nicaean state.¹⁹³ In other words, until the first half of the thirteenth century, the Italians seem not to have been exporting their own luxury textiles—at least in notable quantities—to Byzantium; rather, in the twelfth century, the greater portion of the high-end textile imports were entering Byzantium from areas under Muslim control including Spain, the latter possibly via Genoese or Venetian traders as a result of Byzantium’s increased trade with these cities in the twelfth century. The references to Syrian silks in the *Book of the Eparch*, Attaleiates’s will that mentions Saracen cloths, Alexios I’s admiration for Syrian garments, as well as the

¹⁹² Durak, “The Location of Syria in Byzantine Writing,” 42-55.

¹⁹³ Gregoras 1, 43.

reference to eastern textiles in nun Maria's will from the end of the eleventh century, which we shall see below, are evidence taken from the eleventh and twelfth centuries that show the importance of the East in luxury imports to Byzantium. Of equally great significance is the observation that there are no references to non-luxury textile imports into Byzantium during the twelfth century. In this regard, it is significant that out of about 1,500 works from the twelfth century searched in the TLG, of which over a hundred from the twelfth and thirteenth centuries refer to cloths, I noted no instances of foreign imports of non-luxury textiles into Byzantium. It is therefore reasonable to conclude, in the absence of contrary evidence, that in the twelfth century, local producers and domestic production were supplying the internal demand for clothing for the larger section of the population that was not able to purchase imported luxury cloth fabric and garments. The first possible reference to Italian wool is in the above mentioned passage involving Alexios IV, but it seems that Choniates used the words worthless, "cheap wool" and "Latin" together to criticize Alexios IV's predilection for and reliance on Latin support to gain the crown.¹⁹⁴ Still the reference presumes

¹⁹⁴ Choniates, *Historia*, 557. Choniates uses the word "Latin" 167 and "Italian" 45 times in the TLG corpus and nowhere else does he use the word cheap in relation to either Latin or Italian. This strengthens the argument that in the above-mentioned case Choniates is implying the worthlessness of Latin headgear; otherwise, he does not associate low price with Latin textiles. His condescending attitude toward the Latins can be seen on another occasion, influenced by Eustathios of Thessalonike's first-hand account on the Norman siege, where Andronikos I in his letter to David, the governor of Thessalonike, advises him not to fear the Latin shoe-stitchers ("pediloraptoi"), undermining the ability of the Norman attackers on Thessalonike in 1185. S. Kyriakidis, "Eustazio di Tessalonica. La espugnazione di Tessalonica," *Testi e Momenti* 5 (1961), 82. The association, I believe, both in Niketas and Eustathios is made between the harmless handicraftsmen and the besiegers, who in these authors' eyes, were not bellicose enough and so did not instigate much fear in the hearts of the besieged.

familiarity with cheap western wool, even if that familiarity did not come from seeing it in the local market. It is also worth remembering that, since Alexios IV escaped to Italy and then spent time in Germany, trying to recruit military support from his brother-in-law Philip of Swabia and his allies against his uncle Alexios III, it is not impossible that he bought his hat during his exile/sojourn in the West. To my knowledge, there are no references from the twelfth century which indicate that non-luxury or luxury textiles or raw materials for textile production were being imported from areas other than those under Muslim control. Parani's observation concerning the conspicuous oriental influence such as the caftan-like-garments *kabbadion* and the *skaramangion* on Byzantine official dress code through the twelfth century is also significant in this regard.¹⁹⁵ In the twelfth century, we are still noticeably far from the economic developments that unfolded in the latter half of the thirteenth and the fourteenth centuries that instigated a Byzantine mathematician around the middle of the fourteenth century to include

¹⁹⁵ Parani, *Reconstructing the Reality of Images*, 58. *Skaramangion* and *kabbadion* are two examples reflecting the dress preference of the aristocracy and both have eastern provenance. Both were a type of caftan. Of the two, *skaramangion* was older and it is first mentioned in the eighth century in Theophanes the Confessor as a Persian general's garment. *Kabbadion*, from Arabic "qaba" (a long overcoat with full-length sleeves) was first used in the *Kletorologion* of Philotheos (ca. 900). On both see Parani, 57-61. *Kabbadion* was in use still in the fifteenth century; it is the main ceremonial attire of title holders according to the fourteenth-century book of ceremonies, the *Pseudo Kodinos*. *Skaramangion* was also in use during the later-Byzantine period. On "qaba" see H. Wehr, *A Dictionary of Modern Written Arabic*, J. M. Cowan, ed., (Wiesbaden, 1979), 869.

“Italian woolen cloth” among cloths one could measure using the three different units the author gives.¹⁹⁶

The Western Textile Industry in the Thirteenth-Century Context

The thirteenth century ushered in a new era in the European textile industry and this development had a significant impact on the demand for imports from Byzantium. Internally, the thirteenth century was significant also because Corinth, Thebes and the Peloponnese were no longer under Byzantine control after 1204 (except for part of the Peloponnese, where the Byzantines regained foothold in 1262), nor was the silk-producing city of northern Greece, Thessalonike, whose silk industry Benjamin of Tudela mentioned in the twelfth century. The same is true for Constantinople which was under French and Venetian control. Furthermore, by the twelfth century the Crusaders were well versed in tapping successfully into the products and raw materials of Syria and Egypt via the Crusader states established in Syria and Palestine.¹⁹⁷

From the eleventh to the thirteenth century, Europe went from being primarily an importer to becoming an exporter of finished luxury textiles. Exports fostered an increase in the number of workers. This was accompanied by several innovations in the production of cloth that dramatically increased productivity at the beginning of the

¹⁹⁶ Nicholas Artabasdos Rhabdas in P. Tannery, "Sciences exactes chez les Byzantins," *Mémoires scientifiques* 4 (Paris, 1920), *Epistula*, 17.

¹⁹⁷ Jacoby, "Silk Crosses the Mediterranean," 63-64.

twelfth century; the horizontal treadle loom replaced the older, simpler looms; the spinning wheel replaced the distaff, and the use of water-powered fulling mills (used in wool production) expanded in the twelfth and the beginning of the thirteenth centuries.¹⁹⁸

Northern Europe, England and Flanders first developed their woolen industries in the eleventh and the twelfth centuries. In the Mediterranean world, the Italians were the first to reap the benefits of extracting the best raw materials and producing, as well as exporting finished textiles. Italian merchants began challenging the supremacy of the northern industry only in the latter half of the thirteenth century.¹⁹⁹ The merchants in

¹⁹⁸ E. Ashtor, *Levant Trade in the Later Middle Ages* (New Jersey, 1983), 4-5; Wright, *Weaving Narrative*, 28. The shift from the warp-weighted loom to horizontal treadle loom is believed to have taken place sometime between eleventh and the thirteenth centuries. See, L. Bender-Jørgensen, *North European Textiles until AD 1000* (Aarhus, 1991), 150-152; N. Crummy, "From Self-Sufficiency to Commerce: Structural and Artifactual Evidence for Textile Manufacture in Eastern England in the Pre-Conquest Period," in D. G. Koslin and J. Snyder, *Encountering Medieval Textiles and Dress*, 31 argues that in England the warp-weighted loom was replaced by the horizontal treadle loom earlier in the eleventh century. A. Reist-Eicher, R. Windler, "Mit den Füßen weben," *Kunst+Architektur in Schweiz* 57 (2006), 29-35 argue that it might date from the tenth century or before in England. I find it reasonable to argue along the lines of the evidence presented in Bender-Jørgensen that given what we know about the industrialization of textile production in Europe, even if earlier prototypes of the treadle loom date from the eleventh century or before then, one would expect to see the spread of the improved versions of loom technology later during the twelfth and the thirteenth centuries in regions where the textile industry was well-developed. Bender-Jørgensen observes that the vertical looms were never fully uprooted by the horizontal loom and survived within the household to meet domestic need as a simpler technique for weaving textiles. See, Bender-Jørgensen, 151-152. The earliest fulling mills are recorded in Italy in the tenth century, in Normandy in 1087, in England in the twelfth century. Fulling involved trampling the cloths after rinsing and caused the cloths to shrink about 1/3rd of the original size so it was best to stretch before drying. Crawford, Pritchard, Staniland, *Textiles and Clothing*, 17-18.

¹⁹⁹ E. Carus-Wilson, "The Woolen Industry," in M. M. Postan, E. Miller and C. Postan, eds., *The Cambridge Economic History of Europe. Trade and Industry in the Middle Ages*, vol. 2 (Cambridge, 1987), 646.

this trade were chiefly Florentines and Lucchese, called “Lombards,”²⁰⁰ who had a large share in the wool trade and derived great wealth from it.²⁰¹ The Italians were in Flanders and England to acquire wool before these areas became prime exporters in their own right later in the thirteenth century. In the latter half of the twelfth century and the thirteenth century, the English sold their wool to Italian merchant societies, for up to twenty years in advance, for prices agreed on the day the contract was signed.²⁰² Not to be forgotten are the massive amounts of wool produced by large pastureland-holding monastic houses, such as the Cistercians.²⁰³ At least five towns—St. Omer (1280, 1350-75), Brussels (1282, 1376, 1380), Leuven (1298), Mechelen (1331-1332), and Ghent (1360)—issued ordinances specifying the dimensions of the woolen ordinarily red

²⁰⁰ For a good overview of the definition of the term Lombards and Lombardy and different variations in its meaning over the centuries see G. Raccagni, *The Lombard League 1167-1225* (London, 2010), 9-10. Lombardy refers to the Po Valley and its inhabitants (which corresponds roughly to the Roman province of Gallia Cisalpina). The multiple definitions could easily create misunderstanding; there was Lombardia, Romania and Marchia and Philip of Ravenna in mid-thirteenth century refers to all three as *tota Langobardia*. Primary sources refer to “Lombardias,” “societas Lombardie” or simply to the “Lombardi” (Lombards). Raccagni thinks that Lombardy and Liguria were synonymous in the twelfth century. *Ibid.*, 131.

²⁰¹ R. J. Whitwell, “Italian Bankers and the English Crown,” *Transactions of the Royal Historical Society* 17 (1903), 176.

²⁰² A. Bell, C. Brooks, P. R. Dryburgh, *The English Wool Market c. 1230-1327* (New York, 2007), 7.

²⁰³ Whitwell, “English Monasteries and the Wool Trade in the 13th Century,” *Vierteljahrschrift für sozial- und wirtschaftsgeschichte* 2 (1904), 1-33.

scarlets (scarlets were not always red) and their mode of production, regarding which extremely detailed information, down to the shearing fees, is available.²⁰⁴

At the turn of the thirteenth century, more specifically, after ca. 1300, the Italians were flooding the English ports, among them most importantly Southampton, to buy finished wool cloth, rather than raw wool.²⁰⁵ Yet Italian producers need sources of raw wool for their own production. To meet this growing demand the Italian traders, who were trading in every corner of the known world by the twelfth and thirteenth centuries turned to “Romania” and the Middle East. From the late thirteenth century onward, the Byzantine lands and the Middle East gradually began to replace England, Flanders and Spain as the major suppliers of raw wool for the Italian cloth industry. Because of the fierce competition from the wool-cloth producers in Europe after ca. 1300, it would be quite challenging for the Byzantine finished wool-cloth producers to penetrate the European market in any sustained way.²⁰⁶ Whether this fierce competition itself caused the decline in Byzantium’s exports to the West, seems plausible, but it remains to be proven.²⁰⁷

²⁰⁴ J. Munro, “The Medieval Scarlet and the Economics of Sartorial Splendour” in N. B. Harte and K. G. Ponting, eds., *Cloth and Clothing in Medieval Europe* (London, 1983), 30-31.

²⁰⁵ J. D. Hurst, *Sheep in the Cotswolds: the Medieval Wool Trade* (Stroud, 2005), 115-116.

²⁰⁶ Ashtor thinks that textile production in general in the Middle East was declining already in the twelfth century. See Ashtor, *Levant Trade*, 6.

²⁰⁷ Jane Schneider argues that the decline in Byzantium’s (and the East’s) imports into the West was caused by a shift in taste in Europe from multi-colored clothing to the more sombre and aristocratic black.

It was not just wool. Regarding cotton, linen and silk as well, the turn of the fourteenth century seems to have constituted a key moment in the accelerating arc of European textile production and a visible decline in exports of finished products from the East in general relative to the previous centuries. Despite the low quality of the Sicily's cotton, the fulcrum of the cotton trade was Sicily. Venetians and the Pisans both entered into commercial relations with Sicily in the first half of the twelfth century, although the Genoese reaped the lion's share from it.²⁰⁸ The Venetians, on the other hand, dominated the raw cotton exports from the parts of Romania they controlled, Syria, Armenia and Cyprus from the thirteenth century on.²⁰⁹ These areas comprise most of the regions where cotton was grown and commercialized. The remaining cotton-producing regions not dominated by Venetian merchants were Turkey, especially its coastal areas (except the Black Sea), Egypt and southern Italy. Egypt was an open cotton market for all Western merchants, while the Genoese controlled the bulk of the Turkish and the south Italian cotton market.²¹⁰ Venetian cotton trade in the

The peacock-like multi-colored silks and garments fell out of favor in the West by the fifteenth century – most of her examples are from that century. J. Schneider, "Penguins and Peacocks: the Political Economy of European Cloth and Colors," *American Ethnologist* (1978), 5.3, 413-447. I would like to thank Prof. Daniel Smail for the reference. Price, taste, product-availability all play a role. All of these aspects of a product and the preferences of the consumer body affect the import/export trends.

²⁰⁸ M. F. Mazzaoui, *The Italian Cotton Industry in the Later Middle Ages 1100-1600* (Cambridge, 1981), 31.

²⁰⁹ *Ibid.*, 38-44; J.-K. Nam, *Le commerce du coton en Méditerranée à la fin du Moyen Age* (Leiden, 2007), 184, 189.

²¹⁰ Nam, *Le commerce du coton*, 141-152, 155-157, 199-201.

Levant was connected to cotton cloth production in Venice and in northeastern Italy.²¹¹ In the Veneto, Verona was an early center of both woolen and cotton cloth production. A guild of cotton cloth producers existed there from at least the 1210s, possibly earlier.²¹² Other cities in northern Italy established guilds associated with cotton-production in the thirteenth century. In the first two decades both Bologna and Parma took measures to promote cotton manufacture; Padua had a cotton producers' guild before 1236.²¹³ Italian imports of Anatolian cotton can be traced from ca. 1300 on from the coasts of Antalya (Pegolotti's employer, the Bardi company, had privileges in Antalya in the early fourteenth century), Ayasuluk (Ephesos), Palatia (Miletos) and Gallipoli.²¹⁴ Regarding linen, Ashtor writes that the Genoese exported Flemish and German linen to Egypt, historically the prime address for linen for European and other markets, already at the end of the twelfth and the beginning of the thirteenth centuries—a trade that would intensify thereafter.²¹⁵

²¹¹ Mazzaoui, *The Italian Cotton Industry*, 68.

²¹² *Ibid.*

²¹³ *Ibid.*, 69-70.

²¹⁴ *Ibid.*, 44.

²¹⁵ Ashtor, *Levant Trade*, 5. Low Countries, North-West France which, alongside Poland, Germany and Russia, were the primary flax-growing areas in Europe. Because of the competition from wool, from the eleventh century on, northern France, as well as central and eastern Europe controlled by the German Hanse, specialized in flax-growing and linen-making. M. Postan, "The Trade of Medieval Europe," in M. M. Postan, E. Miller and C. Postan, eds., *The Cambridge Economic History of Europe. Trade and Industry in the Middle Ages*, vol. 2 (Cambridge, 1987), 175-176.

Similar observations may be made for European trends in silk production. Western silk production outside of Spain began in Sicily and southern Italy well before the mid-twelfth century Norman raid on Greece, probably in the eleventh century. In northern Italy, on the other hand, the organization of the silk industry took place later, in the thirteenth century.²¹⁶ Already in 1255 Lucca had a silk dyers' guild with clearly defined regulations.²¹⁷ The first mention of a Venetian silk-weavers' guild comes in 1265. We learn that Florence's silk producers were organized about twenty years earlier than Venice, in 1248.²¹⁸ Byzantine silk types such as the samites and the *diaspers* were produced in the West from the latter half of the thirteenth century on. For example, Venice specialized in samites and Lucca in *diasper* and perhaps also the samites.²¹⁹ Again, in the thirteenth century, Spain developed a new type of samite. The long-sleeved silk lampas, developed in Muslim Spain in the twelfth century, was increased in variety by both the Italian and Spanish weavers of the late thirteenth century.²²⁰ The development in the quality and establishment of new types among the silk-weaving

²¹⁶ See Part 3, n. 34.

²¹⁷ Bini, 57.

²¹⁸ Muthesius, "Silk in the Medieval World," 337, 339.

²¹⁹ Tietzel, *Italienische Seidensgewebe*, 58-59.

²²⁰ Muthesius, "Silk in the Medieval World," 343-344. On lampas see Part 3, n.62.

industries of Italy and Spain induced the development of weaving machinery. For example, silk twisting machines were built in Bologna by a citizen of Lucca in 1272.²²¹

In addition to all of these exciting new internal developments regarding textile production and its technology in Italy, Spain, England, as well as in Flanders, and Germany, one should add the state of textile production in the Levant to which the Europeans had immediate access via the crusading states established in Syria and Palestine. In the latter half of the twelfth century and the thirteenth century, European Crusaders (especially the French and the Venetians) benefited from having direct access to both the raw materials and the finished garments of the Middle East. Damascus and Bagdad were sources of silk *siqlatins* interwoven with gold. Raw silk came from Syria and Palestine. Silk clothes were manufactured in Damascus, Tripoli, Tyre, Gaza and Ashkelon. According to Maqrizi, for example, when the Muslims conquered Tripoli in 1289 from the Crusaders there were 4,000 silk weavers. Cotton was grown in Acre and Tiberias, while wool came from Ramla.²²² The increased self-sufficiency of the European textile (luxury and non-luxury) industry in meeting domestic demand especially after the thirteenth century is clear from the abundant documentation in the scholarship on European textiles and textile-producing cities, mainly of England and Flanders such as

²²¹ *Ibid.*, 346.

²²² Taqi-ad-Din al-Maqrizi, "The Book of Proceeding to the Knowledge of the History of Kings," F. Gabrieli, ed., *Arab Historians of the Crusades* (London, 1969), 343; J. Folda, *Crusader Art in the Holy Land, from the Third Crusade to the Fall of Acre 1187-1291* (New York, 2005), 476-477.

Ghent, Bruges, Ypres, St. Omer, Douai, Stanford and Lincoln.²²³ Even in terms of silks, as we have seen in our analysis of inventories in the previous chapter, in the fourteenth century the silken cloths and garments were primarily supplied by a western European city (Lucca) even though Romania, Cyprus and “Tartary” were still significant.

The Changing Picture of Imported Textiles in Byzantine Sources ca. 1100-1400

The next step in our analysis consists of a detailed study of the references to textiles imported into Byzantium and how patterns of importation changed over three centuries starting from the middle of the eleventh century. Below I will analyze in detail eight Byzantine testaments dating from the end of the eleventh century (1098) to the end of the first quarter of the fourteenth century. The abundance and variety of textile types is the common denominator in these testaments. Geographically the testaments are distributed roughly equally between Thessaly (5) and western Asia Minor. Temporally, only one testament is from the very end of the eleventh century; we have two testaments each from the twelfth and the fourteenth centuries, while the rest (5) are from the thirteenth century. Overall, the testaments offer a fairly reliable window onto luxury items; common textiles were less frequently noted. As such, these texts are

²²³ R. van Uytven, “Cloth in Medieval Literature of Western Europe,” in Harte and Ponting, eds., *Cloth and Clothing*, 150-183. In addition to the above mentioned cities Reynolds, studying the Genoese notarial documents, mentions other textile (mainly woolen) producing cities such as Chalons, Liège, Beauvais, Amiens, Arras, Cambrai, Corbie, Reims and Saint Quentin (corresponding mainly to France’s Normandy, Champagne and Île-de-France provinces, or the northwestern region of modern France). See, R. L. Reynolds, “The Market for Northern Textiles in Genoa 1179-1200,” *Révue belge de philologie et d’histoire* 8.3 (1929), 831-851.

reliable indicators of imported items and fashions: expensive clothing in general but especially foreign cloths are distinguished from the rest as valued items of one's possessions and bequeathed to next generations who were usually family members. It is in general quite significant that alongside rugs and carpets, clothing was also transferred from one generation to the next. This highlights the relative value and the frequency of the use of textiles as property one could use for many years and pass on if they remained in acceptable condition. To complement the eight testaments, I will also utilize the mentions of textiles in the court cases of Chomatianos and Apokaukos, both of which date from the early thirteenth century, as well as a few other texts that illuminate the use and nomenclature of high-value textiles in Byzantine society. This study underscores the transition from a luxury textile market dominated by goods of eastern origin before the thirteenth century to a western one. At the end of this study, I will offer a brief overview of when western textile imports became dominant in the local Byzantine market.

Table 3. 1. Textile Items from the Testament of Maria (1098) ²²⁴

Iviron 1098 Item	Number	Color	Specifications
ἐπιλώρικον (garment worn over armor)	1		ἀντιοχιτικόν, τὸ φορεμ(ένον) τὸ ὄν κατὰ σωφορίου (from Antioch or in Antiochene style, worn like an undergarment)
σφικτούρ(ιον) (some kind of a band or belt) above.	1		This item possibly belongs to the <i>epilorikion</i>
τὸ φουφούδ(ιν) τὸ ἀληθ(ι)ν(όν) (of real fougoudin cloth)	1		τὸ ἀληθ(ι)ν(όν) (of real fougoudin cloth)
σαγίον (large robe)	3	Blue (1), completely colored (1)	[Of] goat hair with enmeshed pattern [μετὰ ναρθηκωτῶν γραμμάτων] (1), double-layered wool [δίμαλλος]
ἐνάπλιον (rug, carpet)		Plural	Silk
μανδύα (cloak, coat)	3	Purple	With “real” pearls (1)
ἱμάτιον (garment, dress)	4	Green, yellow	Samite
ἱμάτιον	1	Green	μολχάμ(ιον) (Ar. weaved tissue, cloth of silk and some other stuff)
χάσδιον (cloth)	22	Dark green/green-black, blue (6), green (6), red (2), white (2)	Cotton (11)
βηλάριον (cloth, perhaps a more generic name for cloth than the more specific one χάσδιον)	34	Green (3), blue (4), white (1), purple (1)	Cotton (7), two are described as “ἀληθινόν”, χάσδιον (4)
ζωσμάτιον (belt)	1	Green	
φᾶκιᾶλιον (Lat. face- cloth, towel)	1		With golden patterns

²²⁴ J. Lefort, N. Oikonomidès, and D. Papachryssanthou, *Actes d'Iviron. II. Du milieu du XIe siècle à 1204. Archives de l'Athos XIV* (Paris, 1990), 178-183.

Our earliest testament comes from the documents preserved at the Athonite monastery of Iviron. The 1098 testament of the nun Maria,²²⁵ daughter of Basil *kouropalates*,²²⁶ includes, among a list of goods ranging from bowls and bracelets to items made of gold, a number of textile items given to her family, fellow nuns and freed household servants. Family members, nuns and monks received the most expensive items of her clothes such as a silk (specifically samite) garment and a cloak with pearls. She also bequeathed to each of the household servants two or three cotton cloths she calls *chasdia* (a type of cotton or silk cloth).²²⁷ These are mostly green or blue, but one is

²²⁵ Possibly Xêne is Maria's monastic name.

²²⁶ *Kouropalates* is a high-ranking dignity, given to imperial family members as well as important figures not related by blood to the emperor. Kazhdan, "Kouropalates," on-line *ODB*.

²²⁷ The word is of Arabic etymology. According to *EI* ("Khazz" and "Farw" *Encyclopaedia of Islam, Second Edition*. Brill Online, Accessed 7.6.2012) *chasdion* could mean silk, or beaver fur. *Chasdion* is used 43 times in the TLG. Tenth-century *oneirokritikon* of Achmet (F. Drexel, *Achmetis Oneirocriticon* (Leipzig, 1925), 217. 13) is the first, Sphrantzes' sixteenth-century revision is the latest to use it with no indication that it was imported: V. Grecu, *Georgios Sphrantzes. Memorii 1401-1477* (Bucharest, 1966), 288, 328, 448. Χάσδιον is a textile usually of silk, purple color. Parani argues that, as in Maria's will, there are also cotton versions of it. See M. Parani, B. Pitarakis, J-M Spieser, "Un exemple d'inventaire d'objets liturgiques. Le testament d'Eusthathios Boilas (Avril 1059)," *REB* (2003), 157. It seems to me that the author specifically separates cotton *velaria* from cotton *chasdia*. Thus, I infer that the cotton ones are specified possibly with the purpose of differentiating them from the regular (?) χάσδια of silk, but also possibly of felt (beaver?), in view of Mavroudi's interpretation of the tenth-century *Oneirokritikon* of Achmet. Timothy Dawson argues that *chasdia* are a costly type of silk from the Islamic Near East. T. Dawson, "Propriety, Practicality and Pleasure: the Parameters of Women's Dress in Byzantium, A.D. 1000-1200," *Byzantine Women: Varieties of Experience 800-1200* L. Garland, ed., (Aldershot, 2006), 45. Mavroudi states that the reference with this word in the *Oneirocriticon* is to a kind of fur. M. V. Mavroudi, *A Byzantine Book on Dream Interpretation: the Oneirocriticon of Achmet and its Arabic Sources* (Leiden, 2002), 471. Whatever material (cotton, silk or pelt) was used for *chasdion* and whether silk or linen were used for *foufoudin*, both were expensive textiles. In the fourteenth-century Pseudo-Kodinos, 163 an imperial officials' head wear (*skaranikon*) is covered with purple *chasdia* that has a little red tassel on the top (LSJ Lat. *funda*, *belt for carrying money*), so in that case possibly silk is meant:

"Τὸ δὲ σκαράνικον αὐτοῦ ἐνδεδυμένον κόκκινον χάσδεον, ἔχον ἐπὶ κορυφῆς μικρὰν φοῦνταν κοκκίνην."

white. We should recall here the contemporary reference by Nikephoros Bryennios mentioned above; even if the unspecified “garments” which Alexios I’s brother Isaac Komnenos brought with him when returning to Constantinople from Antioch, were more valuable items and not necessarily *chasdia*, the reputation of Antioch as a source of valuable garments as well as *chasdia* finds confirmation also in this testament.²²⁸ For our purposes it is quite significant that all the references in the text to possible imported items as well as other items concern Syria explicitly or are of Muslim provenance. For example, Maria gives a garment worn over armor imported from Antioch or made in the Antiochene style (*epilôrikion antiochitikon*) to one of her men,²²⁹ and she gives to the monks of Iviron a large “Saracen” wine jug.²³⁰ Maria’s belt goes possibly with her *epilôrikion*. Yet another Arabic textile term appears in Maria’s list of items: she bequeathed a *foufoudin*, a short, baggy trouser that was cut at the knee-level, to a male slave.²³¹ Another of her garments was a *molchamion*, a garment or cloth made of

²²⁸ See above, Part 3, n. 190.

²²⁹ J. Lefort, N. Oikonomidès, and D. Papachryssanthou, *Actes d’Iviron. II. Du milieu du XIe siècle à 1204. Archives de l’Athos XIV*, (Paris, 1990), 180, line 24.

²³⁰ “οἶνανθάριον τὸ μέγα τὸ σαρακηνικόν.” *Ibid.*, 179, line 38.

²³¹ “These were excessively wide in their upper part, but corded up beneath the knee.” Goitein, vol. 4, 162. On *φουφούδιν* also see M. Parani, B. Pitarakis, J-M Spieser, “Un exemple d’inventaire d’objects liturgiques. Le testament d’Eusthatios Boilas (Avril 1059),” *REB* (2003), 157. The exact meaning of the term is not known. *Foufoudin* (sometimes spelled as *foufoulia*) has four references in the TLG, the first is in the *Book of the Eparch* in the tenth century (*Eparchenbuch* 5.1., where it is stated explicitly that *foufoulia* came from Syria), while the latest reference is in a testament from 1142, which we will discuss in detail below.

combined silk and cotton threads, also originally an Arabic term.²³² It is worthy of note that the items bearing Arabic names are all luxury items. Apart from *chasdion*, which is a term that is first attested in Achmet's *Book of Dreams* (*Oneirokritikon*), in the *Book of Ceremonies* (both from the tenth century), and used fairly regularly through the fifteenth century, *foufoudin* and *molchamion* are much more limited in use with two and four mentions respectively in Byzantine literature searched in the TLG.²³³ This might suggest that, even though in origin it was certainly foreign, *chasdion* (like *sthlabinikon*) was not necessarily a foreign import by 1098. Garments or textiles called *foufoudin* and *molchamion*, on the other hand, are more likely candidates for being foreign imports, because they occur much more rarely and for a much briefer period, between the tenth and the middle of the twelfth centuries, leaving less scope for the development of a local ware whose name preserved the memory of its foreign origins. The etymologies of the textile terminology in use at the time, *foufoudin*, *chasdion* and *molchamion* found in Maria's will suggest that Byzantium's Muslim neighbors were the most important suppliers of luxury textile items to the Empire, during the late eleventh and early twelfth century. The terms *skaramangion*, *kabbadion*, *chasdion*, even though they indicate their original Eastern provenance, because they were used continuously from the eighth

²³² "A fabric with a silk warp and a woof of some other [usually cotton] stuff." See, "Libās" *EI2*. Also see, "Kutn" *EI2* (Both sources were accessed on 6. 29. 2012).

²³³ *Molchamion* is mentioned twice in the tenth century *Book of Ceremonies* (both references are on the same page, which mentions the salary of the *protospatharios*) J. J. Reiske, *Constantini Porphyrogeniti imperatoris de ceremoniis aulae Byzantinae libri duo*, vol. 1 (Bonn, 1829), 607, lines 10 and 11.

to the fifteenth and sixteenth centuries, are less likely candidates for imported textiles as we move further away from their first period of appearance. However, at the time of the writing of this testament, *chasdion* was likely imported from Syria, specifically from Antioch, as it is also mentioned in another contemporary source (Bryennios) where the city emerges as a source of quality textiles. Hence, we are left with at least three imported textiles that Maria mentions in her testament; namely, *chasdion*, *foufoudin* and *molchamion*. They all were imported from the East, while the only specified eastern provenances are Syria and Antioch in Syria.

Two twelfth-century testaments mention textiles. The first, dating from ca. 1119 was drawn up for Sabbas, hegoumenos of the monastery of St. John the Theologian on the island of Patmos in the Aegean.²³⁴ It is a goldmine for its list of books and movable goods, although it also contains a few references to beds for visitors who would briefly stay in the monastery, as well as to bed sheets and possibly night gowns, if the latter fall under the general term “garment/ gown” (ἔνδυμα).²³⁵

²³⁴ The dating of the testament is by Oikonomides in “The Contents of the Byzantine House from the Eleventh to the Fifteenth Century,” *DOP* 44 (1990), 207.

²³⁵ *MM* 6, 245.

Table 3. 2. Textile items from the Testament of Sabbas (1119)

Patmos 1119 Item	Number	Color	Specifications
κρεβατοστρωσίτζιον (bed) ²³⁶	3		
ὑφαπλῶμα (blanket or sheet)	Plural		Cotton, τζόχα (thick woolen cloth or sometimes garment), κουκουλάρικον (low-quality? silk) ²³⁷
ἔνδυμα (garment)	2		
ἐφάπλωμα (bed cover)	2		Pure silk (καθαρομέταξα)

According to Oikonomides, beds are rarely mentioned in the Byzantine sources because separate beds were unusual household items for ordinary Byzantines who would normally sleep at night on their daytime couches.²³⁸ Considering the imperial support the monks of Patmos enjoyed since the monastery had been founded in 1088 under

²³⁶ I am including this item here to provide context even though it is not a textile.

²³⁷ It appears in J.J. Reiske, *Constantini Porphyrogeniti imperatoris de cerimoniis aulae Byzantinae libri duo*, vol. 1 (Bonn, 1829), 678 lines 4 and 8. Also appears in three other sources, the latest of which is a document from Chomatianos in the early thirteenth century which we will analyze below. In the *De Cerimoniis*, the acts of Theotokos Eleusis and Chomatianos' rulings a distinction is made between silk and *koukoularikon*. H. Bresc also notes that the thirteenth- and fourteenth-century south Italian sources consistently distinguish between *cuculus* and silk. Bresc, "Mûrier et ver à soie en Italie (Xe-XV- siècles)," 335. He thinks, therefore, that this was an inferior type of silk. Jacoby agrees, "Silk Production in Frankish Peloponnese: the Evidence of Fourteenth Century Surveys and Reports," repr. in *Trade Commodities and Shipping*, VIII, 54. The word has Latin roots, if it is derived from "cuculus" Lewis and Short, 486, itself the root of "cucold" as in "to cheat," or "cheated" and by inference, as both Bresc and Jacoby think, "cheap."

²³⁸ See Oikonomides, "The Contents of the Byzantine House," 209-210 on the exceptional use of beds in everyday lives of ordinary people who normally would sleep in their couches.

Alexios I Komnenos, we should not view the items listed by Sabbas as commonplace staples of regular Byzantine households with designated rooms for overnight visitors. The reference to a garment, and sheets of pure silk *katharometaxa* (καθαρομέταξα), are indicative of the relative wealth of the monastery and the high social status of its visitors. Even here, where the textiles occupy a rather small part of the testament, the only foreign loan word, *tzocha* (τζόχα), is of eastern origins, either Turkish or Persian, yet again demonstrating the eastern resonance of textiles and the tradition of imports from Byzantium's eastern neighbors rather than western imports during the early decades of the twelfth century.²³⁹ It is not clear if *tzocha* was a coarse woolen (either of sheep or goat) garment/cloth in the early twelfth century. The fact that it is listed as the raw material for blankets or sheets which are cotton and a cheaper type of silk (*koukoularikon*), suggests that it may not have been a cheap, rough type of wool at that

²³⁹ Certainly still exists in modern Turkish as “çuha” and in Modern Greek as τσόχα(ς). This is the first attested use of the term in Byzantium but it remained in use in Greek down to the present. One wonders how different in material and form was τζόχα from σθλαβινικόν. The latter was probably of higher quality wool as one might surmise from its use in *Eparhenbuch* 5.1. Yet it most likely was not a luxury product at least in 1247 as the monastery which had them in its possession had about one hundred of them. For τζόχα, see V. Vogiatzoglou, *Επώνυμα της Μικρασίας* (Athens, 1992), 179. According to G. Babiniotes, *Ετυμολογικό Λεξικό της Νέας Ελληνικής Γλώσσας* (Athens, 2009), 1473, the origin of the word is Persian. The Seljuk court and intellectuals wrote in Persian. The Byzantines may have borrowed it from the Turks, who in turn, used many Persian textile terms. A. Tietze, *Tarihi ve Etimolojik Türkiye Türkçesi Lugatı. Sprachgeschichtliches und etymologisches Wörterbuch des Türkei-Türkischen* (Istanbul, 2002), vol 1, 537. *Xocca* (or *xoca*) in Latin may in fact derive from *tzocha*. See, Du Cange, *Glossarium ad scriptores mediae et infimae latinitatis*, 3 vols. (Frankfurt am Main, 1681): <http://clt.brepolis.net.ezp-prod1.hul.harvard.edu/dld/Default.aspx> (Accessed 1. 9. 2013). I would like to thank Prof. Daniel Smail for pointing out this probability. One other similar textile term is *kemhā*, (It. *xamouxas*, Gr, χαμοῦχα). It is originally a Chinese term that the Italians (and Westerners), the Byzantines, Persians, as well as the Turks used. This luxury textile first appears in Byzantine texts in the thirteenth century.

time. It is clear, however, that these blankets or sheets were less valuable than the ones listed as being of “pure silk” (*katharometaxa*).

These two testaments suggest, then, that when in the late eleventh and the early twelfth century, luxury textiles were imported, they came mainly from the Empire’s Muslim neighbors. Furthermore, the relatively low frequency of foreign terms used for low-quality textiles during the same period suggests that domestic textile production was able to meet the local demand in low-quality textiles. As we can tell from the examples on *chasdion* and *sthlabinikon*, even when foreign terms were initially deployed for new types of low-quality textiles, there is subsequent evidence showing that eventually these items were also made in Byzantium. There was, in other words, nothing foreign in these textiles other than their names.

The second twelfth-century document is the inventory of the monastery of Xylourgou, a dependency of the Athonite monastery of Panteleimon for Russian monks.²⁴⁰ All of the textiles mentioned in this text, for example, the altar cover, the *bema* curtain and various decorated silk cloths clearly served liturgical purposes. Even though the probability seems low to me, this testament may offer the first indication of Italian imports.

²⁴⁰ G. Dagron, P. Lemerle, S. Ćirković, eds., *Actes de Saint-Pantéléèmon* (Paris, 1982), 4-5.

Table 3. 3. Textile Items from the Inventory of the Monastery of Xylourgou (ca. 1142)

Panteleemonis ca. 1142	Item	Number	Color, Specification	Type
	ἐνδυτή (altar cover)	2		Linen
	σκεπάσμα (altar cover)	2		Linen
	βηλόθυρον (curtain in front of the bema. Actes, 68)	1	White	Βελέσιν (From the Venetian "valessio," a cotton cloth, according to Trapp, vol. 2, 272)
	μανδήλιον (handkerchief)	9		Linen (2)
	ἐπιτραχίλιον (a long scarf priests wear around their necks)	3	"Russian" (1)	Golden
	φουφούδιον (breeches)	3		One listed as silk (βλάττιον)
	ὑπομάνικον (priest's cuff)	1 pair	White and sparkly (or purple?) with golden seams (μαργέλλιον χρυσόν). Μαργέλλιον (Lat. margo. Trapp, 974).	-
	ἐπιμάνικον (priest's cuff)	plural	Silver and gold, with motifs (ἐγκαιστον), silver (plural)	-
	ποτηροκάλυμμα (chalice cover)	2		Silk
	βλάττιον (here a liturgical silk cloth)	1	With griphon embroidery	Silk
	βλάττιον (here a liturgical silk cloth, possibly different than the one above)	plural	With double eagle embroidery	Silk
	βλάττιον (here a liturgical silk cloth possibly different than the one above)	1	"Russian" with golden rims and golden cross	Silk
	σφηκτούριον (belt)	1	Lion embroidery	Silk
	ἔνδυμα (garment)	1		Silk
	ἐγχείριον (liturgical cloth, a "woven hanging" but may have also been used for various other purposes, as altar cloth for example) ²⁴¹	2	"Russian", with animal motifs as embroidery	Silk (2)
	σάκκιον (short-sleeved dalmatic?) ²⁴²	9		
	δίσακκιον	2	New	
	σάγματον (saddle, but here perhaps mantle.) ²⁴³	1	Covered with cloth?	

²⁴¹ V. Nunn, "The Encheirion as Adjunct to the Icon in the Middle Byzantine Period," *BMGS* 10 (1986), 73-102; Parani, Pitarakis, Spieser, 154.

²⁴² Piltz, *Trois sakkoi*, 24.

²⁴³ Trapp, vol. 7, 1519.

Most of the items are silk and linen with the exception of the possibly cotton cloth, βελέσιν, deriving from “valessio” which is used in one other text from Cyprus.²⁴⁴ Some of the highly decorated silk liturgical items are identified as “Russian.” Their presence can best be explained via the strong presence of Russian monks in the monastery; this institution had been traditionally known as “the monastery of the Rus.”²⁴⁵ If Trapp’s identification, the Venetian roots of the term “velesin” (from Venetian, “valessio”) and the reading of the word in this document, which the editors seem not to be sure about, are all correct, then this is the first instance of an Italian textile term being used in the Byzantine written record.²⁴⁶ A second term in this

²⁴⁴ Trapp, vol. 2, 272. The Cypriot document is from the thirteenth or the fourteenth century. Ed. and trans. A. Beihammer, *Griechische Briefe und Urkunden aus dem Zypern der Kreuzfahrerzeit. Die Formularsammlung eines königlichen Sekretärs im Vaticanus Palatinus Graecus 367* (Nicosia, 2007), 43, 66-67, 111-112, 317-321. It is a fiscal check-list for the the royal tax collector, prepared under the Lusignan, who began ruling Cyprus in 1191. The folios containing this document are dated to 1317-1320, but the original of the document itself might date from before. Nevertheless, the earliest date for the Cypriot document which Trapp cites containing *velesion* is over fifty years later than the Xylourgou testament. It is not clear to me if *valessio* has anything to do with “veli di cotone” mentioned in the Italian sources, not limited to those esuing from Venice. According to Nam, “veli di cotone,” were medium-quality cottons, produced mostly in central Italy. Nam, *Le commerce du coton*, 66. If the word is indeed borrowed from the Italian original then we would have to find out when it is first used in Italian texts.

²⁴⁵ *Actes de Saint-Pantéléèmon*, 4.

²⁴⁶ The editors of the testament are not sure if this document was a copy of the original and also not sure about the word *velesin*, that is, they are not sure if *velesin* is the correct reading. See, *Actes de Saint-Pantéléèmon*, 65, 68. According to I. N. Kazazes and T. A. Karanastases, *Επίτομη του Λεξικου της Μεσαιωνικής Ελληνικής Δημώδους Γραμματείας 1100-1669 του Εμμάνουηλ Κριαρά* (Athens, 2001), βελέσσι is an outer garment for women. They cite Michael Soummakes’ *Faithful Shepherd* published in Greek in Venice in 1638, alongside Trapp. All of the other uses of βελέσιν date from either the thirteenth or the fourteenth century: the term is used in four different documents (from 1324, 1325, 1342, 1376 respectively) in the collection of wills from Venetian Crete (which contains 790 wills in total). See S. McKee ed. *Wills From Late Medieval Crete 1312-1420* (Washington D.C., 1998), vol. 1, 193, vol. 2, 529, 535, 751. Marco Polo also possessed three “coltre bianche de velesio” listed in his will from 1324. In both the Cretan wills and Marco Polo’s will *velesio* is the material blankets (*coltra*) are made of. Cecchetti, *La vita dei*

document, *margellion* (seam, margin), is of Latin origin and might also point to Italy. Hence, if our identifications are correct, not only one but two Italian terms have been used in this testament. The second appearance of *margellion* is in Theodore Balsamon's (d. after 1195) *scholia* on the twenty-sixth canon where he expands on the dress code of the clergy.²⁴⁷ Balsamon specifies that the clergy should avoid expensive clothing that have *margellia* with embroidery (*grammata*) or seams, or garments in red/crimson dyed with mollusc.²⁴⁸ The remaining uses of *margellion* are from the thirteenth and the fourteenth century.²⁴⁹ From Balsamon's usage of the term *margellion*, it is evident that

veneziani nel 1300. Le vesti (Venice, 1886), 127. In Doge Francesco Dandolo's (d. 1339) will curtains are "de velesio." See, P. Molmenti, trans. H. F. Brown *Venice: its Individual Growth from the Earliest Beginnings to the Fall of the Republic* (Chicago, 1906), 197. The best answer whether "valesio" is in fact the term used in the Xylourgou testament could potentially come from the Italian documents. According to S. Battaglia, *Grande dizionario della lingua Italiana* (Torino, 1998), vol. 21, 634 "valèscio (valèssio)" was a garment or cloth of cotton. The earliest source Battaglia lists that mentions this term is the *Capitoli della Compagnia dei Disciplinati della Madonna di Siena*. This source, in turn, is a collection of documents dated to the thirteenth through the fifteenth centuries. According to the *Denomasticon Italicum*, "vellexio," (with its derivative forms *velexio*, *valescio*, *valescio*, *valiesio*, *velesio*, *velessio*, *valesio*, *gualleccio*, *valescio* and *valesso*) defined as "tela di cotone sottile," is found –at the earliest– in a document from 1318 in A. Stussi, ed., *Testi veneziani del Duecento e dei primi del Trecento* (Pisa, 1965). In short, according to the *Denomasticon Italicum*, the term and its derivatives are attested in Italian texts from the early fourteenth century to mid-nineteenth century. See, W. Schweickard, *Deonomasticon Italicum. Dizionario storico dei derivati da nomi geografici e da nomi di persona* (Tübingen, 2006), vol. 2, 198 and its *Supplement* (Tübingen, 1997), 90.

²⁴⁷ G.A. Ralles and M. Potles, *Σύνταγμα των θείων και ιερών κανόνων των τε αγίων και πανευφήμων Αποστόλων* (Athens, 1852), vol. 2, 365. I am grateful to Prof. D. Angelov for this reference.

²⁴⁸ *Ibid.* "ἀνοίκειος δὲ τῷ κληρικῷ στόλη ἐστίν, οὐχὶ τὰ τῶν στρατιωτικῶν ἐνδύματα...ἀλλὰ τὰ πολυτελῆ χρυσοῦφанта ἐπιβλήματα, τὰ δημοτικῶς λεγόμενα μαργέλια γραμμата, καὶ ἀντίπανα, καὶ τὰ ἐκ κογχύλης πορφύροντα ἱμάτια."

²⁴⁹ According to the TLG, *margellion* (or sometimes *margelion*) is used in Byzantine Greek literary texts a total of twenty four times, of which two are found in a thirteenth-century *scholion* on Tzetzes' *Histories*. The term Tzetzes uses in the twelfth-century text Leone, I. 7. line 234 (p. 11) is κόσσυβον and the definition given in the thirteenth-century *scholion* is μαργέλλιον. Leone, *Scholia*, 236 (p. 531). Gennadios Scholarios (fifteenth century) mentions *margellion* in his *Grammatika* to explain another (new?) term which seems to suggest that by his time it was well in use: "λῶμα, μέρος ἱματίου ἡγουν τὸ μαργέλλιον." M.

that word had entered colloquial usage before the time of his writing. Even though “valesio” or “velesin” seem to have been Italian terms that became loan words much later in the thirteenth or the fourteenth century, it is certain that at least one Latin textile term, *margellion*, entered Greek usage by the twelfth century. The context of this borrowed term is unfortunately lost to us; we do not know if these seams/*margellia* were imports into Byzantium or not, but its appearance for the first time during the twelfth century indicates that some kind of material exchange between the West and Byzantium was taking place in that century. It seems that during the twelfth century, however, finished garments or woven cloths from the Muslim world have a dominating presence in the Byzantine markets compared to the western ones. This was going to change in the next century. The fact that this testament has the latest attested occurrence of another foreign textile loan term is worthy of note: *foufoudin*, mentioned three times in this text, was imported from the East, as we have discussed regarding the testament of Maria above.

The donation of Alexios Tsaites in 1232-1233 to the Lembos monastery near Smyrna is much more humble but still liturgically inflected. It refers to altar cloths, a cope and chalice covers without any further details as to the make-up of the cloths of

Jugie, L. Petit, and X. A. Siderides, *Oeuvres complètes de Georges (Gennadios) Scholarios*, vol. 8 (Paris, 1936), 465. The remaining references are from the fourteenth-century *Pseudo-Kodinos*.

these items.²⁵⁰ Since provenances are not stated, and since the types of cloths are not defined, it seems more likely that this testament contains locally produced, non-luxury liturgical textiles. Foreign items, silks or textiles deemed valuable are usually listed distinctly and clearly identified because of their value for both the owner and the inheritor(s).

One could contrast this humble testament with a letter of John Apokaukos, metropolitan of Naupaktos, dating from about the same time as Tsaites' testament. In this letter, Apokaukos writes that, not being able to meet Theodore Doukas of Epiros in person in Ioannina or Deabole, he sent him two samite cloths, one in the imperial red, the other orange-tawny (perhaps yellowish is meant), reminiscent of fasting and the metropolitan's own sickly composure.²⁵¹ There is nothing explicitly foreign about the luxury textiles that Apokaukos sent Theodore Doukas in this letter dating from ca. 1225-1233/34. Yet the letter could be used as a rare evidence for the endurance of silk textile production in Epiros. Coupled with the sources that we discussed above regarding

²⁵⁰ MM 4, 57. This testament contains one ἀλλαγή (priests' vestment, cope), a number of chalice covers (ποτηροκαλύμματα) and two altar covers (ἐνδυται).

²⁵¹ Petrides, 21, lines 10-17: "...συναγαγὼν ἄμφω, τὴν ἐπίσκεψιν καὶ τὴν ἐορτήν, καὶ τὴν ἐνδεχομένην φιλοφροσύνην διπλώσας δύο σοι διπλάρια ἐξάμιτα πέπομφα, τὸ μὲν κόκκινον προσενείμας τῇ πανηγύρει, βασιλὶς γὰρ αὕτη τῶν ἐορτῶν καὶ σὺ βασιλεὺς ἡμέτερος, βασιλικὸν δὲ ἄμφιον καὶ τὸ κόκκινον· τὸ δὲ γε κιρρὸν τῇ νόσῳ καὶ τῇ νηστείᾳ, ὥχροι γὰρ γινόμεθα καὶ ἐγκρατευόμενοι καὶ νοσοῦντες." Lampropoulos does not suggest a date for this specific letter but it must have been written between the crowning of Theodore Doukas in Thessalonike in early 1225 (as Theodore is referred to as "emperor" above) and 1232 when Apokaukos himself was still the metropolitan of Naupaktos (he died in 1233/34). See K. Lampropoulos, *Ιωάννης Απόκαυκος· Σύμβολη στην έρευνα του βίου και του συγγραφικού έργου του* (Athens, 1988), especially, 260-299.

Pope Urban IV's 1260 acquisition of samites in the Peloponnese, not too far from Naupaktos itself, and another letter of Apokaukos which will be discussed below, we can surmise, although not prove, that Epiros was producing silk garments—still in the first half of the thirteenth century.²⁵²

The case brought to the court of Demetrios Chomatianos, archbishop of Bulgaria, is indicative of the wealth of his plaintiff, Ioannikios Achouraites of Berroia, whose inheritance had been illegally appropriated by his brother, whom their mother had appointed as protector at her death, and by the husband of Ioannikios's cousin.²⁵³ The complaint by Ioannikios contains a long list of Ioannikios' movable properties among which the textiles are laid out in the table below.

Table 3. 4. Textile Items from the Inheritance of Ioannikios Achouraites of Berroia (ca. 1225)

Chomatianos <i>Ponemata</i> 84 item	Number	Color, specification	Type	Value
μανδύον (mantle, cloak) ἱματίον	1	Saffron yellow		6 nom.
ἱματίον (garment)	1	Saffron yellow		10 nom.
μανδύον καὶ σκιαδηψίον (some kind of head cover that shelters from the sun?, sun shade?)	1			4 1/6 nom.
πάνιον αἰγυπτιακόν (Egyptian cloth)	20 πήχεις	Egyptian		
πάνιον (cloth)	20 πήχεις			
πάνιον (cloth)	20 πήχεις	κουκουλάρικον (from raw silk. Trapp, vol. 4, 871) ²⁵⁴		

²⁵² See pp. 468 and 488.

²⁵³ *Ponemata* 84.

²⁵⁴ The term might also refer to low-quality, coarse silk.

Table 3. 4. (Continued)

σκέπη (cover)	2	Embroidered with gold		
σινδόνη (sheet, cover)	1 pair	(ζυγὴν γυγίων σινδονίων)		
σάβανον (cloth, towel, perhaps of linen but not specifically stated here. Trapp, vol. 7, 1517)	1			
κομοεκμάγιον (bath towel, specifically to dry or rub hair ²⁵⁵)	1			
κουρτζουβάκιον (short hose, breeches)	1			

The list itself as well as the mention of a formidable vineyard of sixty-four *modioi* in size,²⁵⁶ which the brother did not keep intact for Ioannikios until he came of age, all reveal the impressive wealth of the Achouraites family, especially in view of the fact that Ioannikios' share actually represents a third of the parental assets; apart from Konstantinos, the older brother and defendant, Ioannikios had one other older brother (Leon) who was allotted the last third of their parents' inheritance. The prices of the woolen *mandya* (mantle, cloak) range from 4.5 to ten *hyperpyra* and attest to the high value of these items. In fact these woolen *mandya* are about the same price as a red samite garment worth about seven *hyperpyra* mentioned in another court case in Chomatianos.²⁵⁷ The cover/sheet "embroidered with gold," as well as the "Egyptian cloth" (probably imported) all together indicate the costliness of these textiles and the affluence of the family that owned them. Even though the Egyptian cloth does not have

²⁵⁵ I would like to thank Prof. D. Smail for his interesting comment on rubbing as cleaning technique.

²⁵⁶ Not counting the thirty ἐξάγια of gold, icons worth seven *hyperpyra* (*nomismata* in the text). *Ibid.*, line 62 ff.

²⁵⁷ "ὕφασμα καθεξαμίτου κίτρινον εἰς ποσότητα νομισμάτων τρικεφάλων εἴκοσι καὶ ἐπέκεινα." *Ponemata* 19. 72-74.

a price, the costliness of the rest of the textile items is clear, for as I noted in the previous chapter, adult slaves at around the same time cost about twenty-thirty *hyperpyra* while cattle cost about twenty *hyperpyra*.²⁵⁸ This court case from the first half of the thirteenth century is also a good indication that the luxury clothes were still being imported from the East. As Egyptian cloths are not mentioned anywhere else in the TLG corpus, and since most of the remaining references are to Egypt as a geographic location, this specific reference in Chomatianos is likely to an imported item rather than to a textile locally made imitating the Egyptian style.²⁵⁹

The items Chrysos, the potter from Kastoria gave to his Vlach mistress, Tzola, are indicative of what most people in the successor Greek states could afford. Chomatianos' court in Ochrid ruled that if Chrysos and Tzola were ever to commit adultery again, all of the goods Chrysos gave to Tzola, including the linen cloth of thirty *pechys*,²⁶⁰ the

²⁵⁸ See Part 3, n. 3.

²⁵⁹ There are about a hundred instances of "Egyptiakos" (with all its derivative forms) in the TLG corpus (3rd -16th centuries). Chomatianos' use of the adjective is the only instance that defines a type of cloth. The other references are all to adjectives that specifically refer to Egypt as a geographic location such as the "Egyptian soothsayers" in Gregoras and the "Egyptian letters" in Pachymeres. For Gregoras see H.-V. Beyer, *Nikephoros Gregoras, Antirrhethika I* (Vienna, 1976), 257, line 16, and for Pachymeres A. Failler, *Le version brève* (Paris, 1976), vol. 1, Book 6, chapter 12, line 10.

²⁶⁰ "Forearm" about 47cm. This could be a localized version of this measurement. See Schilbach, 43-55.

woolen carpet (ἐριυφές κατάστρωμα) called *tzerga* in Vlach, alongside the cattle and a beehive, would be taken away from her.²⁶¹

Even though Chrysos and Tzola's case does not mention silks, the way Chomatianos advises Chrysos Leon, who is reinstated as a monk after having been married a while, to wear a black robe of wool, linen, "or of silk, if he so wished," signals the ease with which a monk of means could find a robe in different fabrics in Epiros in the early thirteenth century.²⁶²

Another divorce case from Chomatianos mentions two Italianate terms explicitly for the first time in Byzantine literature: a silk tunic, *καζάκας* (Ital. "cassaca"),²⁶³ and sock, (*σκάλτζα* from Italian "calza").²⁶⁴ The case involves a couple of exchanges between Basil and his ex-wife Kale's family that came from a military background (the father was a soldier). Whatever came into the marriage from Kale's family as part of the

²⁶¹ *Ponemata* 136, lines 23-25. Lampsides translates *τζέργα* as wool tent but Michael Panaretos' text which he edited (ἤρπαζεν ὁ Παιράμης τὰς τζέργας) is not as specific as the reference above, the word *κατάστρωμα* literally means "that which is spread on the floor." See ed. O. Lampsides, *Μιχαήλ τοῦ Παναρέτου περὶ τῶν Μεγάλων Κομνηνῶν* (Athens, 1958), 63 (line 24) and 94. On Chomatianos' uses of "adultery" and "fornication" based on this and a number of other cases see from Epiros see, Laiou, "Contribution à l'étude de l'institution familiale en Épire au XIII^{ème} siècle," in *eadem*, *Gender, Society and Economic Life in Byzantium* (Hampshire, repr. 1992) V, 286.

²⁶² *Ponemata* 128. Ὅθεν καὶ ἀπεφῆνατο ἀπέχεσθαι μὲν αὐτὸν κρέατος κατὰ μοναχοῦς, τὸ περιυχένιον ῥάκος ὑπὸ τὸν χιτωνίσκον αὐτοῦ περιφέρειν, μελανειμονεῖν τε ἔκ τε ἐριυφῶν ἐσθημάτων καὶ λινιοεργῶν (καὶ σηρικῶν δέ, εἰ βούλοιτο), καλύπτειν δὲ πῖλῳ τὴν κεφαλὴν ἀπερίττω μέλανι καὶ αὐτῷ,..."

²⁶³ *Ponemata* 19, line 63. For *kazakas* see, Trapp, vol. 4, 726.

²⁶⁴ Trapp, vol. 7, 1559. This could just as well refer to a pantihose or breeches.

dowry reverted back to the family, and whatever Basil brought into the marriage reverted back to him. Thus, Basil requested his three silken cloths (κοπτάνα) back and Eirene, Basil's ex-mother-in-law, returned two of them, but in place of the third one, she gave Basil a silk tunic (*kazakas*), which suggests that each cloth was more or less equal in value to the silk tunic.²⁶⁵ Regarding the socks/breeches, on the other hand, Chomatianos rules that they — alongside the horses and armor (λωρικίον) — should be returned to their first owner. Therefore, Basil had to return the tunic, the armor and the socks/breeches back to his ex-father-in-law, a member of the military, because the ownership of the military tunic was attached to the father-in-law's military status which he transferred to his own descendants. After the divorce Basil was no longer considered a relative; hence the ruling.²⁶⁶

The first explicit reference to western cloth importation comes from Asia Minor from the middle of the thirteenth century. The Planetai family of Smyrna was a frequent donor to the Lembos Monastery even before one of the brothers, Maximos, became a monk there. Shortly thereafter, he prepared his testament in 1255, which is preserved in the monastery's archive.²⁶⁷ The textile items referred to in this testament are in general

²⁶⁵ *Ponemata* 19, lines 61-62. This is the only reference to this term in TLG. According to Trapp, vol. 4, 863, there is another thirteenth century reference from the Vazelon monastery archives.

²⁶⁶ *Ponemata*, 19. 63 and 86.

²⁶⁷ Basil and Maximos donate land and trees in Mantea first in ca. 1242 and then Basil and their sister Anyisia in 1257. See *MM* 4, 66-69, 86-88.

more humble than what we encounter in the aristocratic testaments and the liturgical component is smaller.

Table 3. 5. Textile Items from the Testament of Maximos Planetos (1255)²⁶⁸

Maximos Planetai 1255 (Lembos), Item	Number	Color, specification	Type
γούνα (pelt, fur)	2		
πάνιον	5 σπιθαμάς		
φελλουπόδημα (from φελλός A kind of slipper made out of oak wood, or cork) ²⁶⁹	Plural	"Low"	
περισθίτιον (armor? chest guard)	1	"Beautiful"	
δέρμα (leather, pelt)		Fox	
ποκάμισον (shirt)			Linen
κάππα (lat. cappa. Mantle, cope)	1		
λέντιον (lat. linteum. Linen cloth or sheet)	1		Linen
σινδώνη (sheet, coverlet) ζυγή φραγγική	1 pair	Frankish (φραγγική)	Linen?
τραχήλιον (a long scarf priests wear around their necks, έπιτραχήλιον ²⁷⁰)		With pearls	
σαβαναλουτρικόν (bath towel)	1		
σάβανον	1		
έφάπλωμα	1	Red	καθεξάμιτιν
Λωρίκιν (λωρίκιον, "armor" Trapp, vol. 5, 956) ²⁷¹	1		
τζόχα	1	"Which I cut (made?) for Constantine" ²⁷²	
έφάπλωμα τό αὐδὶν (pillow case?)	1		

²⁶⁸ MM 4, 74-75. Also see, K. Smyrlis, *La fortune des grands monastères byzantins* (Paris, 2006), 56-61.

²⁶⁹ D. Demetrakos, *Μέγα Λεχικόν Όλης της Έλληνικης γλώσσας* (Athens, 1964), vol. 15, 7970.

²⁷⁰ Parani, Pitarakis, Spieser, 155.

²⁷¹ Λωρίκιον is shield or armor but λουρίκιον is a belt. See, Demetrakos, *Μέγα Λεχικόν*, vol. 9, 4415-4416 for both. However Maximos bequeaths his son two helmets (κασσίδια) alongside the armor, hence the reading as armor is probably correct.

²⁷² In this text and in Chomatianos, 19. 66 τζόχας is clearly clothing rather than cloth. In Chomatianos' text fifty trikephala worth of τζόχας which one of the parties was wearing at the time of the court case. The case is thought to date before 1225 because Theodore Komnenos Doukas is still referred to as despot instead of emperor. *Ponemata*, 19. 87.

As such, the cotton and/or linen pillow cases, sheets, towels as well as the animal pelts stand apart from the purple silk cloth (possibly for liturgical purposes) and the liturgical scarf “with pearls.” Furthermore, the presence of a *lôrikion* (shield, armor) and helmets among Maximos’ possessions, which he bequeathed his son, might suggest that he was a member of the military. A more unusual, interesting item in this testament, however, is a pair of “Frankish” covers/sheets (*σινδόνη*) which indicates that a well-to-do member of the Nicaean society could buy “Frankish” *σινδόνη*, possibly in the local market. The Planetai are certainly well off, as the references to their immovable properties in their donations to Lembos dating from 1242 and 1257 also suggest.²⁷³ The fact that Frankish coverlets/sheets seem to have been available in the state of Nicaea before 1255, is quite significant and noteworthy. In this context, the presence of Latinizing textile terms, such as *kappa*²⁷⁴ instead of the usual term *allage*, alongside the “Frankish *sindone*” also suggests the availability and perhaps even the relative abundance of these western clothes in Nicaean markets.

Table 3. 6. Textile Items from the Testament of Maximos of Boreine, Philadelphia (1247)

Maximos of Boreine, Philadelphia (1270-74) Item	Number	Color, specification	Type
ἀλλαγή	8	White, purple	
ἐπιτραχήλιον (a long scarf priests wear around their necks)	2		
Χρυσοκλαβαρικόν (cloth embroidered with gold)	2		

²⁷³ MM 4, 66-69 (1242); 86-88 (1257).

²⁷⁴ *Ibid.*, line 12.

Table 3. 6. (Continued)

ἐπιμάνικον χρυσοκλαβαρικόν (cuff embroidered with gold)	2 pairs		
Ποτηροκάλυμμα (chalice cover)	2 pairs		
αἴρ (some kind of a scarf or a veil?) ²⁷⁵			Gold
βλάττιον χρυσιζόν (silk woven with gold threads)	4 + more (exact amount not given)	With lion motifs	Gold
χρυσοκόκκινον [golden red cloth of some sort?]	1	With griphon motif	Possibly silk?
ἀσπρόχρυσον [white cloth with gold?]	1		
σαρκεσίν (altar cloth? Vatopedi I, 152)	1		
ἔνδυτή	4		
πηλωτοπροσκέφαλον	44		Cotton (βαμβακόγομον) (4), wool (40)
ἐφαπλώμα	4		Cotton
σθλαβώνικον (heavy wool cloth? blanket?)	100		Wool?
ἐνάπλιον (bed spread)	4		
ἐπεύχιν (rug)	1		
σάβανον (cloth, towel)	2		
πρόσωψιν (face towel?)	1		
σινδόνιον (cover, sheet)	1		Linen?

The testament of Maximos, hegoumenos of the monastery of Boreine, 1 km south of Philadelphia, established in 1247, contains the most extensive list of textiles among the thirteenth century testaments.²⁷⁶ The monastery itself, founded as a familial institution by Maximos' father, is fairly rich in both landed property and immovable

²⁷⁵ A. Gosonová, in the on-line *ODB*, defines this as the largest of the three silk liturgical veils used in important ceremonies.

²⁷⁶ J. Bompaire, J. Lefort, V. Kravari, C. Giros, *Actes de Vatopédi I* (2001), 152-162 for the text; The English translation of this text is in G. Dennis, "Skoteine (Boreine). Testament of Maximos for the Monastery of the Mother of God at Skoteine near Philadelphia," in J. Thomas, A. Constantinides-Hero, eds., *Byzantine Monastic Foundation Documents* (Washington D.C., 2000), vol. 5, 1176-1195. Also see, Smyrlis, 38.

properties, most of which were acquired through purchases. The monastery had grown to about twenty monks in total at the time that this *diataxis* was written.²⁷⁷ Based on the frequent references in the text to mulberry trees, watermills, and the variety, the abundance of textile items cited in the document, one could argue that the monastery was engaged in producing cloths at least to meet its own needs. The explicit ban on the monks' selling textiles, however, increases the likelihood that there was also enough of a surplus that made it possible for the monks to envision selling clothes.²⁷⁸ It is not common even for a monastery with five dependencies, with only twenty monks to need one hundred (woolen?) covers/blankets (*σθλαβωνικά*) and forty-four pillows. Of course, the presence of mulberry trees is not as strong an indication of silk production as the presence of a hundred (perhaps woolen) blankets in the monastery's possession and the presence of 1,500 sheep are for woolen cloth production.²⁷⁹ The restriction on the monks' selling or exchanging their clothes indicates that the monks were engaged in textile production, especially in light of the phrase, that they should not "weave more than their need so as not to destroy the common order."²⁸⁰ The implication here is that they potentially could, and possibly did, hence the restriction. There is strong evidence

²⁷⁷ *Actes de Vatopédi I*, 154, lines 64-66.

²⁷⁸ It was common for monks to engage in trade and sell their surplus. See, *Smyrlis*, 223-230.

²⁷⁹ *Ibid.*, 161 lines 287-291.

²⁸⁰ *Ibid.*, 157, line 146: "μή πλέον πλέκειν παρὰ τὴν ἐνοῦσαν αὐτοῖς χρεῖαν ἐπὶ ἀνατροπῇ τῆς κοινῆς εὐταξίας..."

here for domestic production of woolen items, while the intention for commercialization is explicit in the exhortation of the testator. Whether the monks were engaged also in raw silk production, cannot rest on this evidence alone.

Table 3. 7. Textile Items from the Testament of Theodore Karavas (1314)²⁸¹

Theodore Karavas Chilandar 1314 Item	Number	Color, specification	Type
ἐφάπλωμα βελεσικόν, μεταξωτόν (silk, cotton cover or sheet)	4		Cotton? (3) (βελεσικός. According to Trapp, 272, cotton), silk (1)
ἐσωκουρτζούβρακιον (underwear)	2		Cotton? (βελεσικά)
τζόχα	3	Worn, old (2) “πεφορημένα” ²⁸²	

Theodore Karavas’ testament, preserved in the acts of the Chilandar monastery archives, has only one silk item: a sheet (or cover, ἐφάπλωμα); the remaining are cotton items and a thick wool(?) cloth (τζόχα), which he identifies as “worn.” This is the second attested appearance of the term Italian (Venetian, according to Trapp)²⁸³ term *valessio* (βελεσικός), after the 1142 inventory of the monastery of Xylourgou, a dependency of the Athonite monastery of Panteleimon of Russian monks. It is uncertain

²⁸¹ C. Giros, V. Kravari, and M. Zivojinovic, *Actes de Chilandar I, Des origines à 1319* (Paris, 1998), 215-219.

²⁸² The fact that the tzocha was “πεφορημένα” worn (like a garment) shows that these were items of clothing rather than pieces of cloth.

²⁸³ See above Part 3, n. 244.

whether the cotton, knee-length undergarment (ἔσῳκουρτζούβράκιον), and the coverlet (ἐφάπλωμα), or the *valessio* cloth they were made of, were imported by 1314 (possibly from Italy) or not. Theodore Karavas' testament attests to the continued usage of the Persian/Turkish term *tzocha*, which we first encountered two centuries earlier (in 1119) in the testament of Sabbas of the monastery of Patmos. Whether *tzochas* were still imported from the East (from the Turks or Persians, in particular) at this time is not certain, but quite unlikely. Other than the origins of the term, there is no indication in this specific text that the term was imported into Byzantium by the date of the writing of the testament. Overall, even though relatively shorter than most of the inventories and testaments discussed above, Theodore's testament contains two loan words, one Italian one Turkish/Persian. The quality of the items that bear originally foreign words is uncertain also, but the fact that the *tzochas* were worn and that *valessio* was the material of everyday items such as the blankets and the undergarment implies that, if *valessio* was imported, the Byzantines were importing possibly non-luxury items from Italy, perhaps specifically from Venice, by the early fourteenth century.

Table 3. 8. Textile Items from the Testament of Theodore Sarantenos (1325)²⁸⁴

Theodore Sarantenos Berroia Vatopedi 1325 Item	Number	Color, specification	Type	Value
ζωνάριον	1	ἄσυρτον (unused)		60 <i>hyperpyra</i>
ζωνάριον	1	Silver-gold, new, having good looking shafts (στύλους εὐμόρφους)		
ζωνάριον	1	With old shafts (στύλους ἀρχαίους)		
ζωνάριον	1	Has 16 φόλας (pl. φόλλις, copper coin) ²⁸⁵		
ζωνάριον	1	Silver-gold and covered with? Φόλας		
ζωνάριον (ζ. and βητάριον (Lat. vitta) are synonyms acc. to Trapp, 277)	1	With 33 silver-gold shafts		
ζωνάριον	1	Silver-gold with φόλας		
πάνιον	400 πήχεις			
μαγνάδιον (Hood? Cover?) χρυσόλωρον	1	With gold bands		
μαγνάδιον μετὰ χρυσαφίου	3	With gold lining?		
κορτίνα	3	New		
πιλωτοψίδιον (mattress cover of felt)	2	"One of them purple and new, the other with designs"		
πιλωτόν προσκεφαλαίον	4	Two of them with προσκεφαλαία		
ῥοῦχον ²⁸⁶	1	Golden		
ἔσοκουρτζούβακον	1			
λωρίκιον	1			
ἔσολωρίκιον	1			
κασίδιον (helmet, head-gear)	1	"Which I bought in the City for 18 <i>hyperpyra</i> "		18 <i>hyperpyra</i>
καζάκας (Ital. casacca. Trapp, 726. Military gown.)	1			

²⁸⁴ J. Bompaigne, C. Giros, V. Kravari, and J. Lefort, *Actes de Vatopédi I, Des origines à 1329* (Paris, 2001), 353-361.

²⁸⁵ See n. 326 below.

²⁸⁶ According to Babiniotes, *Ετυμολογικό Λεξικό*, 1229-1230, this is a word of Slavic origin.

Compared to the other early fourteenth century testament of Theodore Karavas, the items in the testament of Theodore Sarantenos immediately stand out by their splendor. Theodore Sarantenos' wealth evidenced in his testament from 1325 was derived from his wife, herself a Komnena Doukaina Angelina related to the Palaiologoi, as well as from the wealth of the military Sarantenos family at large.²⁸⁷ Theodore himself served among the military in Constantinople.²⁸⁸ He was a wealthy Byzantine from the military, as revealed by the textiles in his possessions. He owned six water mills in total in Berroia, Palatitzia, Skoteinou (both near Berroia) and three hundred sheep alongside many other immovable properties such as vineyards, houses and hostels.²⁸⁹ As for the textiles, the most valuable items in his possession were the six belts he bequeathed to family members, with silver-gold shafts and copper coins (*φολάρια*) on them.²⁹⁰ The remaining items reveal his high status rank in the military, such as the helmet he bought in Constantinople for the exorbitant sum of 18 *hyperpyra*. The armor and the inner armor (*λωρίκιον, ἔσολωρίκιον*) as well as the military gown/tunic (*καζάκας*) are all part of his military wardrobe and judging from the price of the helmet

²⁸⁷ He comes from a land-owning family in Berroia, was married into the imperial family and became a dignitary bearing the title "pansebastos." He would often travel to Constantinople following the founding of the Prodromos monastery in Berroia to acquire a chrysobull confirming its patriarchal status. *PLP* vol. 10, no. 24906.

²⁸⁸ J. Bompaire, C. Giros, V. Kravari, and J. Lefort, *Actes de Vatopédi I*, 348-349, 351, 360-361 (text).

²⁸⁹ *Ibid.*, 349-350, 360-361(text).

²⁹⁰ The follis is used in the plural of its Italianate form, "follaro." See, Grierson, *DOC* vol. 5.1, 26-27. The form *φόλη* (accusative plural *φόλας*) is also used in this will. I would like to thank D. Angelov for his clarification and references.

they too were possibly sumptuous, if not extravagant.²⁹¹ All of the remaining items, the hoods/cover (?) (μαγνάδια) and the felt mattress cover/pillow (πιλωτοψίδιον) are high-quality, luxury items as indicated by their gold lining and embroidery. The similarity between Theodore Sarantenos' testament and the items listed in the possession of Basil in the court case from Chomatianos in Epiros about a century earlier, in the 1220s, derives from the military status of these individuals. Chomatianos' court case was the first attested instance in Byzantine literature where Italian terms for the gown/tunic (καζάκας) and sock (σκάλτζα) were used. These items were likely imported when Chomatianos mentioned them; whether the gown/tunic was still imported by 1325 when Theodore mentioned them, is uncertain. Regardless, concerning military gown/tunic at least, we observe here, after the first attested use of an Italian term during the first quarter of the thirteenth century, its continued use for about a century until its re-appearance in Sarantenos' testament from 1325.

In the early twelfth century, the *Timarion* mentioned that luxury garments (*huphasmata*) were brought into the port of Thessalonike in ships coming from Italy and Boiotia; Phoenicia (Syria), Spain and Egypt were known, according to the anonymous author of the text, for exporting luxury textiles to Byzantium. Spain was particularly famous for its altar cloths, described in that text as "the best."²⁹² The Byzantine

²⁹¹ On καζάκας see n. 263.

²⁹² See Part 3, n. 36.

testaments and the inventories we have analyzed, even though scarce, still allow us to make certain observations on the long-term developments regarding imports of textile items into Byzantium. The first two testaments we have analyzed, that of Maria (1098) and Sabbas (1119), show, together with Nikephoros Bryennios' reference to garments from Antioch, that luxury garments were being imported into Byzantium in the late eleventh and the twelfth century from areas under Muslim control. Among them Syria (Antioch) is specifically mentioned twice, first in the testament of Maria, and then in the account of Nikephoros Bryennios. Borrowed terms such as *foufoudin* and *molchamion* attest to the importance and dominance of Byzantium's immediate Muslim neighbors, and perhaps southern Italy and Spain (neither specifically mentioned apart from the *Timarion*) in imports into Byzantium. Northern Italy was then not yet an exporter of luxury textiles: hence, by Italy we infer that the *Timarion* meant southern Italy and perhaps Sicily, both of which were under Norman control from the latter half of the eleventh century on. Also significant in this regard, is the first known instance of the term *tzocha* in Byzantine literature—a term that remains in use in Greece (and Turkey) until the present day. The mention of an Egyptian cloth in the court case from Chomatianos in the early thirteenth century shows that textile exports from the East specifically, but possibly also from the Muslim world at large, were continuing to be imported into the successor states during the next century. Sometime around the middle of the twelfth century we encounter the first mention of Italian textiles in

Byzantine texts, that is, if the dating of the inventory of the Xylourgou monastery, a dependent monastery of Panteleimon of Athos, is correct. Italian terms such as *valessio* and *margellion* are attested for the first time in that document, which possibly dates from ca. 1142. We have evidence for *margellion* as it also appears in the *scholia* of Theodore Balsamon from the second half of the twelfth century. These references to Italian terms increase in the thirteenth and fourteenth centuries. Italian terms such as the military tunic/gown (*kazakas*) and sock (*skaltzas*) that we came across in two different documents from the 1220s and from 1325, as well as the *valessio* sheets and undergarments mentioned in Theodore Karavas' testament from 1314, attest to the increasing presence of Italian imports. As we will see in our discussion on luxury textiles imports from Italy and the West into Nicaea and Epiros, this trend continued well into the fifteenth century. As to the imports from the East, the terms *skaramangion*, *kabbadion*, *chasdion*, *tzochas*, which appeared in Byzantine texts before the twelfth century, remained in use through the fifteenth and the sixteenth centuries. The later attestations of these terms, I argue, do not constitute reliable evidence for textile imports into Byzantium during the later period. Regarding the later Byzantine period, the new textiles terms that we note in texts were usually borrowed from the Italian, Latin or French from the thirteenth century on. Thus, we would not be amiss if we conclude that eastern textile imports into Byzantium took second position *vis à vis* western imports as the continued presence of references to textile terms *valessio*, *skaltzas* and *kazakas* show.

Textile Production and Luxury Textile Imports: Nicaea and Epiros

There are signs of textile production that we cannot ignore for both sides of the Aegean, however slight that evidence may seem at first. For example, one of the court cases brought to Demetrios Chomatianos involves the community under the bishopric of Pelagonia,²⁹³ (Mod. Monastir, Bitola in Western Macedonia) complaining about the rise in the taxes and dues they paid to the bishopric, each according to his financial ability.²⁹⁴ Chomatianos agrees with the residents of Pelagonia and rules that the previous rates should be reinstated. The dues for the *boidatoi*,²⁹⁵ among other things, include fifty sheaves of flax fibers.²⁹⁶ Fifty flax-fiber sheaves from each resident in Pelagonia may not be a firm enough evidence for cloth production there, nor does it come from an area that was permanently under the control of the Epirote state. However, examples from within Epiros and from Asia Minor may be multiplied.

²⁹³ The city changed hands quite frequently in the thirteenth century and was under Epirote/Latin control briefly after 1212 although it was a suffragan of Justiniana Prima, and thus of Ohrid, when Chomatianos' decision was issued.

²⁹⁴ *Ponemata* 148, lines 25 and 51-53.

²⁹⁵ *Boidatoi* are peasants who owned land approximately the size ox could till. Laiou, *Peasant Society in the Late Byzantine Empire. A Social and Demographic Study* (Princeton, 1978), 161-163.

²⁹⁶ Linen seeds are *linokokkoi* so the "processed" linen mentioned in this text (*δράγματα πεντήκοντα λίνου κατεργασμένου*) is more likely the fiber of the flax (note also that it is measured in "sheaves") used in linen cloth production. The reference might still be to linen oil which might have been used to make candles which are indeed mentioned in this context. According to Schilbach, *Metrologie*, 184 a *δραχμή* (*δραχμή*) was about 3,3 kg. The total linen in this text then weighed about 165 kg.

The surest mention of silk production in thirteenth-century Epiros comes from Apokaukos' reference to the piratical actions of some inhabitants of Naupaktos that targeted the Latins of Patras. Apokaukos writes that after the pirates from Naupaktos attacked the Latins, the latter struck back in 1217 or 1218.²⁹⁷ Possibly to assure that nothing remained behind for the Latins to loot, the local pirates set Naupaktos on fire, burning down all the trees, including the mulberry trees with their "silk growing cocoons and all" as well as the other possessions the inhabitants had.²⁹⁸ Doubtless, Naupaktos, but also the Peloponnese and Boiotia, according to the 1240 agreement between Guy I de la Roche and the Genoese and other evidence, were important in raw silk production and their silk weaving capacity was intact as we have seen in the previous chapter.²⁹⁹ This was true also for western Asia Minor: under the Nicaeans this area was both a raw silk producer and silk cloth weaver.

If we turn to the non-documentary written evidence on the thirteenth century we notice that Italian and occasionally Frankish goods were available in markets in the state of Nicaea, alongside eastern textiles from Syria and Egypt. This is unlike the eleventh and the twelfth centuries when the bulk of the textile imports into Byzantium

²⁹⁷ Bees, 99. For its dating see, *ibid.*, 233-234. It was addressed to Nicholas, bishop of Bonitza who held his see until the end of 1218, which he held from 1217.

²⁹⁸ Bees, 99, lines 9-11 : "οὐχ ὑπελείφθη ἄκανυστον δένδρον, οἱ μεταξογεννήτορες σκώληκες αὐταῖς καλύβαις ἀπώλοντο, τὰ λήϊα καταπεπάτηνται καὶ μῆσι μᾶλλον ἢ δράγμασι γνωρίζεται τὸ θέρος ἡμῶν." *Ibid.*, line 21: "...πᾶσαν περιουσίαν τῶν πολτῶν ἐληίσαντο."

²⁹⁹ See above p. 468 on other evidence of silk production in Epiros.

came only from Egypt, Syria, Muslim Spain, and perhaps from southern Italy. Furthermore, at least one Byzantine source (Gregoras), although writing in the fourteenth century, implies that the Italian, Syrian, and Egyptian imports were serious enough competition for the local production already in the early thirteenth century that John III Vatatzes urged his subjects to buy luxury textiles produced in the Nicaean state.³⁰⁰ It is indeed clear that Gregoras admired the policies of that emperor and did not approve of his contemporaries who wore a rich variety of Italian, Persian, Mysian (Turkish?), “Gothic” (French?) or Paeonian (Bulgarian?) clothes, gowns (*στολή*), which he saw as an external sign of the nation’s internal corruption that tore down the old Roman order as he knew it.³⁰¹ Pachymeres, another admirer of John III’s strict policies and economic conservatism, writes how Theodore II was berated by his father, who ignored him first when he saw his son hunting in silk clothes embroidered in gold (*σηρικὰ χρυσόσημα*), and when asked the source of his anger, bitterly rebuked his son for wasting the wealth of the Romans on naught.³⁰² Pachymeres does not specify where

³⁰⁰ See below, n. 332.

³⁰¹ Gregoras 3, 555-556: “τί δ’ ἂν τις φαίη καὶ περὶ τῶν ἐνδυμάτων, ὅσα κὰν τούτοις παρηνομήθῃ, καὶ ὅπως ἐκτετόπισται τοῦ γνωρίμου τε καὶ συνήθους πολιτεία, ὡς μηδὲ γινώσκεσθαι ἔτι ὅστις Ῥωμαίων καὶ ὅστις τῶν ἄλλως ἐχόντων γενῶν· οὔτε γὰρ Περσικὴ τις ἄκρατος ἢ στολὴ γέγονεν ἤδη Ῥωμαίοις, οὔτε Λατινικὴ τελέως, οὔτε μὴν τις Γοτθικὴ καθάπαξ, οὔτε εἰ τις Τριβαλλῶν καὶ ἄμα Μυσῶν καὶ Παιόνων.”

³⁰² “How good is your conscience toward the Romans that you are pouring their blood over things that have no necessity whatsoever? Do you not know that your silken dresses embroidered in gold, which ought to be used for their service, are [in fact] theirs? Do you want to know when they are for the Romans’ service? They are for foreign ambassadors, for us to show them the wealth of the Romans. For the wealth of the ruler is deemed the wealth of his subjects. For this reason people utterly reject to obey

these silk clothes came from. But he does suggest that, although it was not clear whether or not they were brought for selling, the Italians had with them shiny clothes and other things in Bellagrada (mod. Berat, Albania), which the Byzantine soldiers gathered from the captured Italians and transported to Constantinople for their triumphant procession through the city.³⁰³ The wider regional implications of the Italian textile imports aside, it is significant that in this passage in Pachymeres, in the romance of *Livistros and Rhodamne*, as well as in Gregoras' text both of which we will discuss in detail below, Italian imports from the early thirteenth century are associated with brilliance and elegance or high quality. This may suggest that the Byzantine luxury textiles were the hardest hit by the influx of the Italian textiles and other foreign textiles that the Italians dealt in: we should remember that these had been the textiles exported to the West in the previous centuries. In such an environment, the local non-luxury

others if their own is thus [wealthy]. Do you not see how much you are at fault, using them for naught?" The translation is mine.

“Τί καλὸν συνειδῶς ἑαυτῷ δράσας Ῥωμαίους, ἔφη, τὰ ἐκείνων ἐκχέεις ἐν διατριβαῖς μηδὲν τὸ ἀναγκαῖον ἐχούσαις αἵματα· ἢ γάρ οὐκ οἶδας, φησὶν, αἵματα εἶναι Ῥωμαίων τὰ χρυσόσημα ταῦτα καὶ σηρικὰ, οἷς ὑπὲρ ἐκείνων ἔδει χρῆσθαι, ἐκείνων γε οὐσι; Ζητεῖς δὲ μαθεῖν καὶ ὑπὲρ ἐκείνων πότε; Ὅτε δηλαδὴ ἐπιστᾶσι πρέσβεσιν ἐξ ἀλλοδαπῆς τὸν ἐκείνων πλοῦτον λαμπρεμονοῦντες δηλοῦν ἔχομεν· ὁ γὰρ βασιλέων πλοῦτος πλοῦτος τῶν ὑπηκόων λογίζεται· παρ’ ἣν αἰτίαν καὶ τὸ εἰς δουλείαν καθυπείκειν ἑτέροις σφίσιν οὕτως ἔχουσι καὶ λίαν ἀπώμοτον· οἷς σὺ διακενῆς χρώμενος, οὐ λογίζῃ τὸ πλημμελὲς ὅποσον;” Pachymeres, *Relations historiques*, vol. 1, 61, 63.

³⁰³ Pachymeres, *Le version brève*, 6. 33 (1281): “Ἐπειδὴ γὰρ κατὰ κράτος τὴν νίκην ἔλαβον οἱ Ῥωμαῖοι, καὶ πλοῦτον συλλέξαντες ἐξ ἵππων καὶ ὀπλῶν καὶ ἐνδυμάτων λαμπρῶν καὶ ἄλλων ὧν Ἴταλοι ἐπεφύροντο, ἐπανήγοντο πρὸς τὴν πόλιν.” “ἐπεφύροντο” can mean both bring in and wear. Since the horses and arms also refer to this verb and since it is more likely that the Italians were not selling their horses and arms, it is more likely that the Italians were wearing these shiny clothes, not necessarily selling them. I would like to thank Prof. McCormick for pointing this out.

textile production—most of it presumably done in households—must have been the least affected still in the thirteenth century.

Textile Production in the State of Nicaea

The testament of Maximos offers a rare window into the actual scale of textile production in the state of Nicaea, particularly in and near Philadelphia. Combined with what we know from Gregoras' account of textiles in Nicaea which indicate that silk garments were being manufactured in the state of Nicaea, this testament and a few other documents also demonstrate that in the 1230s Smyrna and Philadelphia were growing mulberries, possibly for raw silk production.³⁰⁴ According to the Pisan commercial manual of 1278, Anaia was listed as a port that exported grain and raw silk which the Pisan merchants could potentially export to any of the ports they stopped at in the Middle East or in Europe.³⁰⁵ In the 1280s, Smyrna and Philadelphia were selling

³⁰⁴ MM 4, (1235) 9 line 8; (1235) 20, line 7; (1251) 23, line 31, to cite a few documents from the thirteenth century. They cover nearly all of the thirteenth century.

³⁰⁵ "La dicina della seta al peso d'Aina torna in Pisa coppie (unit of 2 lbs. of raw silk) V meno tersa." R. Lopez and G. Airaldi, "Il piu antico manuale italiano di practica della mercatura," *Miscellanea di Studi Storici* II (1983), 119 and 127 for the comparative rates of measures of grain (in *modioi* of Anaia and *staia* of Pisa): "le tre moggia d'Aina torna in Pisa i staio." Marseilles, Sicily, Salerno, Puglia, Montpeiller but also Acre, Alexandria, Alexandretta (modern Ayas) are listed in this document that may have been redacted in Siena where the manuscript is found. On the manual see, D. Jacoby, "The Pisan Commercial Manual of 1278 in the Mediterranean Context," in F. Cardini and M. L. Ceccarelli Lamut, eds., *Quel mar che la terra inghirlanda* (Rome, 2007), vol. 2, 449-464. Jacoby thinks that the Pisans were selling the silk to Luccans: *Ibid.*, 459.

raw silks to Lucca and Genoa at the very least.³⁰⁶ Genoese merchants Manuele Cigala and Lombardino Spinula sold “seta Smyrnis” to Lucchese merchants in 1288, according to the account of the acts of the Genoese notary Enrico Guglielmo Rosso.³⁰⁷ It is important to note that Telesforo Bini also noted raw silk exports from “nicchilia et colozani” in a document from 1293, which could be a reference to Nicaea and Koloneia (?) or Kolossai, if this name was still in use then for Chonai, although the last point does not seem certain.³⁰⁸ Before 1294 a Genoese merchant was robbed of two bundles of silk worth 460 *hyperpyra* in the vicinity of Atramyttion.³⁰⁹ It is certain that raw silk was produced in the State of Nicaea, specifically, in the vicinity of Smyrna and Philadelphia (which are only about 100 km distant from each other, with Magnesia lying to their north, forming the tip of a triangle). Perhaps Anaia and Atramyttion served as

³⁰⁶ According to T. Bini, the notary Girardetto da Chiatri (1286) mentions *orsoio crudo* (which according to Bini is a type of “seta torta,” raw silk, possibly stifled (by heating, to prevent the chrysalis inside the cocoon from damaging the threads) from “Smirre” and he also noticed in the acts of Tegrimo and Batolommeo Fulceri (1284) a reference to “seta de smirro d’allara ad pondus Jannuense quam constitit in civitate Janue solidos triginta unum de Janua per libram.” The same source mentions “seta de Smirro et de Filadelfi.” Bini, 48.

³⁰⁷ Racine, “Le marché Génois de la soie en 1288,” in *Revue des études sud-est européennes* 8. 3 (1970), 411 and table 416.

³⁰⁸ In ser Gregorio Orlandi Puccinelli (1293): “pretio coppiarum 21 et unciarum 8 de seta nicchilia et colozani (which Bini thinks from Colossi, near Limasol, Cyprus, so does Heyd II, 9, 422, 687. We could read the first word as Nicosia) at ratio of 9 *lira* and 9 *soldi* per *coppia*. Bini, 49. One would expect these two cities to be geographically near each other like Smyrna and Philadelphia are. They might be from Turkish Asia Minor too, so perhaps the names refer to Neokaisaria (Niksar in Turkish) and Koloneia (Aksaray). Turkish Asia Minor in the thirteenth century was an important supplier of both raw silk and silk textiles. See for example “seta turci” in Pegolotti, 288. Nevertheless, Nicosia and Colossi are at least equally plausible.

³⁰⁹ G. Bertolotto, ed., “Nuova serie di documenti sulle relazioni di Genova con l’Impero Bizantino,” *Atti della Società Ligure di Storia Patria* 28 (1897), 526-527.

additional outlets for the silk from Asia Minor. Whether the Nicaean state imported raw silk during the first half of the thirteenth century is not certain for lack of evidence. However, the documents from Venice and Genoa that mention Lucchese and Genoese merchants, as well as the Pisan manual, show that raw silk was exported to Lucca, Genoa and perhaps other localities in Europe and the Middle East in the second half of the same century.³¹⁰

Theodore Metochites implies that silk was woven in the city of Nicaea itself.³¹¹ Although not mentioned in the Italian sources, regarding the second capital of the Nicaean state where the treasury was kept, Magnesia, we should turn to a letter of Theodore II to his childhood friend and protégé George Mouzalon, which he sent together with six silk golden robes of Magnesian origin, as perfect tokens of his love.³¹²

³¹⁰ See Part 3, n. 305, Chapter 11, n. 18, 25.

³¹¹ See Part 3, n. 328.

³¹² “And we have sent a most beautiful set of six golden silk robes, having drawn this [set] from Magnesia and having sent [this] to our own adamant friend showing to him in the perfection of their number the perfect nature of our love and showing to a stranger by means of the strangeness of its appearance, the apparently strange [nature] of our affection and with the sparkle of the gilded threads in the fabric which pours forth, [we show] the resplendence of our shared brilliance and through the variety of its colors, [we show] the everlasting bloom and the variegated nature of our great union of the soul and good life.”: “νῦν δὲ ἐκ σηροφοινίκων ὑφασμάτων ἑξάδα πέπλων χρυσοπάστων ὡραιότατην τούτῳ πεπόμφαμεν, ἐκ Μαγνητίδος αὐτὴν ἀνελκύσαντες καὶ πρὸς τὸν ἡμῶν ἀδάμαντα στείλαντες, τῷ τελείῳ τοῦ ἀριθμοῦ τὴν τελικότητα τῆς ἡμῶν ἀγάπης δεικνύντες αὐτῷ, καὶ τῷ ξένῳ τοῦ εἶδους τὸ ξενοφανὲς τῆς ἀγάπης ἡμῶν, καὶ τῷ ῥαντισμῷ τῷ τοῖς ὑφάσμασι τῶν χρυσῶν νημάτων ἐγκεχυμένῳ τὸ περιφανὲς τῆς ἡμῶν κοινῆς ἀσυγκρίτου λαμπρότητος, καὶ τῷ διαφόρῳ τῷ τῶν χρημάτων τὸ ἀειθαλὲς καὶ ποικίλον τῆς τηλικῆς ἡμῶν ἰσοψυχίας καὶ εὐζωίας.” Theodore II, *Epistula*, (no. 213), 264-265. Theodore refers to Magnesia as “golden Magnesia” in the same letter and elsewhere (no. 71) as the city that attracts everyone, referring to this city’s “magnetic” quality.

Most of western Asia Minor was lost to the Turks by mid-fourteenth century; Ephesos in 1304,³¹³ Smyrna in 1317, Prusa in 1326, and finally the last free Greek city of Asia Minor, Philadelphia, in 1391.³¹⁴ We know of some aspects of the textile market in Ottoman Ephesos (Altologo as the Italians would refer to it or Ayasuluk in Turkish) and in Philadelphia (Turkish Alaşehir) as well as Denizli.³¹⁵ At the very least concerning Alaşehir—Turkish for “the crimson city”—one might suspect continuity in textile production despite the fact that the textile history of this city is less well-known and attested under the Nicaeans and better known under the Ottomans.³¹⁶ Among the Ottoman cities, Bursa (Prusa in Greek) was the best-known silk center. Unlike Philadelphia, in the case of Prusa, one cannot argue in favor of continuity as there is no evidence in the Greek or Latin sources on this city’s textiles under the Nicaeans (even

³¹³ The governor of Ayasuluk gives Ibn Battuta “a single robe of silk woven with gold threads of the kind that they call nakh...” Ibn Battuta, vol. 2, 445.

³¹⁴ See “Alaşehir,” in EI 2.

³¹⁵ On the textile market at Ayasuluk see, Pegolotti, 55; Ibn Battuta, vol. 2, 445. According to Aşıkpaşazade under the Byzantines Philadelphia was famous for its red silk stuffs, from which banners and robes of honor (*khila*) were made. See, I. Beldiceanu-Steinherr, “Notes pour l’histoire d’Alaşehir (Philadelphie) au XIVe siècle,” in *Philadelphie et autres études Byzantina-Sorbonensia-4* (Paris, 1984), 31-33; EI 2 “Harir.” According to the Ottoman sources and the surviving approximately dated Ottoman textiles, Denizli, Alaşehir and Bursa (Prusa) were the earliest centers of luxury textile production under Ottoman rule. The best discussion of the sources and presentation of textiles are found in these two sources: T. Öz, *Turkish Textiles and Velvets* (Ankara, 1950), 19, 21 and Atasoy, *Ipek*, 47, 156, 159, 161. Manisa (Magnesia of the Byzantine sources) was specialized in cotton cloth production in the sixteenth century: M. Ünlü, 16. *Asırda Manisada Dokumacılık* (Repr. of the author’s PhD dissertation of 1949. Manisa, 2004), especially 31, 37.

³¹⁶ P. Schreiner, “Zur Geschichte Philadelphias im 14. Jahrhundert (1293-1390),” *Orientalia Christiana Periodica* 35.2 (1969), 411.

though Prusa is only 60 km west of Nicaea), yet there is a fair amount of literature on the silks of Ottoman Bursa from the end of the fifteenth century on.³¹⁷

Given the highly technical and complex nature of the silk industry that required a division of highly skilled labor and specialization, I believe that it is of great significance that we hear both about mulberry trees and raw silk exports from cities like Smyrna and Philadelphia at least from the last decades of the thirteenth century. This is only reinforced by the fact that we are also certain that the Nicaeans were engaged in the production of silk textiles. It is also possible, although not certain, that they produced textiles without having to turn to the Peloponnese, Iran, the Caucasus, or Syria for their raw silk, as the Italian cities did in the thirteenth century for their ever-growing silk industries. If the Nicaeans did in fact not seek foreign raw silk, this might

³¹⁷ H. Lowry, *Ottoman Bursa in Travel Accounts* (Bloomington, 2003), 40; S. Faroqhi, "Introduction, or Why and How one might want to Study Ottoman Clothes," in eds. S. Faroqhi and C. K. Neuman, *Ottoman Costumes. From Textile to Identity* (Istanbul, 2004), 15-45; H. Inalcik, "Bursa and the Commerce of the Levant," *JESHO* 3. 2 (1960), 131-147; H. Gerber, *Economy and Society in an Ottoman City: Bursa, 1600-1700* (Jerusalem, 1988), 65-68, 73-83. When Bursa first rose to prominence as a producer of silk clothes, it imported raw silk from Iran. Sultan Bayezid II banned Iranian silk imports in 1518 the ban seems to have been lifted by 1546 as the city was still an importer of raw silk then. See, Lowry, 11, 45 quoting Pierre Belon: "The wealth of Bource comes from silk: because no year goes by that at least a thousand camels coming from Syria and other countries discharge their loads in Bource. There it is dressed, spun, woven, and made into various works; dyed in various manners, because the Turks wear their clothes of velvet which is intertwined with gold and silver and properly made." The first sign of Bursa's becoming a raw silk production center dates from 1588. The city began growing its own mulberry trees from the late sixteenth century on which eventually rose to such a magnitude at the end of the eighteenth century that the size of its mulberry tree "forests" dazzled the onlookers. See, *ibid.*, 48. See Lowry's translation of Domenico Sestini (1779): "The vast plain of Brusse is covered with forests of mulberry and walnut trees, rich vineyards and thousands of other plants...[The mulberry trees] are ordinarily surrounded by large walnut walnut trees and various other fruit trees." *Ibid.*, 56, 58. It is quite interesting that in the acts of the monastery of Lembos too mulberry trees are almost always mentioned together with other fruit trees.

suggest that the silk cloth production was tailored to meet the internal demand only and was possibly of small size. In short, the elusive aspects of the Nicaean silk textile industry, in my view, are its size and its capacity to export: although the evidence is not weighty it is certain that Nicaea at least had a self-sufficient silk textile industry. Yet, based on the thirteenth century western inventories discussed in the previous chapter, Nicaean western Asia Minor, Nicaean and Palaiologan Macedonia (especially Thessalonike), could potentially be considered among the regions from within Romania that made the silk copes and the golden orfreys that during the thirteenth century adorned the treasuries of churches from the Vatican to London. The Nicaeans may even have been exporting their textiles to the other side of the Aegean and perhaps also buying from their immediate neighbors, even though there is no explicit evidence of this type of trade except perhaps the Frankish *sindone* we have seen above and the Frankish *soukania* we are about turn to.

A significant number of sources either from or about the thirteenth century, refer to the presence of Latin/Italian textiles in Nicaean markets. At least one, arguably produced in the State of Nicaea in the thirteenth century, comes to us from a work of fiction whose mentions of textiles seem to reflect real contemporary conditions. This text in question is the Byzantine romance about Livistros, a rich Latin prince of an imaginary kingdom called Livandrou, and Rodamne, the daughter of king Chrysos. The story of Livistros and Rodamne is narrated by the Armenian-prince Klitovos, Livistros'

friend, who describes their adventures as they search for Livistros' beloved.³¹⁸ Since Manuel Manoussacas' 1994 article, the previously proposed datings of the text to the fifteenth century are no longer held.³¹⁹ The two remaining arguments vie between thirteenth-century Nicaea and fourteenth-century Constantinople, with Panagiotis Agapitos and Tina Lendari being the recent proponents of either argument respectively.³²⁰ I find Agapitos' arguments, especially the reference in *LR* to the shield-raising ceremony, which is known from historical sources to have been revived for the first time under the Nicaeans, more convincing, even though not conclusive.³²¹ Before

³¹⁸ P. A. Agapitos, *Διηγήσις Λιβιστρός και Ρόδαμνης. Κριτική έκδοση της διασκευής α* (Athens, 2006). Hereafter, *LR*.

³¹⁹ Manoussacas convincingly argues for a *terminus ante quem* of 1403-1411 based on the work of the Cretan poet Leonard Dellaporta, the earliest attested author who quotes from the *LR*. M. Manoussacas "Le terminus ante quem pour la composition du roman Libistros et Rhodamne," *JÖB* 44 (1994), 298-306. His argument proves that the text was written before the fifteenth century.

³²⁰ For Agapitos' argument and discussion of the dating of the romance see, *LR*, 49-55 and Agapitos, "Debate Genre, Structure and Poetics in the Byzantine Vernacular Romances of Love," *Symbolae Osloenses* (2004), 79:1, 7-54 bibliography, 90-101. For Lendari's argument see, T. Lendari, *Αφήγησες Λιβιστρον και Ρόδαμνης. The Vatican Version. Critical edition with Introduction, Commentary and Index-Glossary* (Athens, 2007), 65-71.

³²¹ Agapitos cites the similarities between the descriptions of the ceremonial ritual (proclamation of an emperor by raising shield) of Livistros in the text with those of Theodore II and Michael VIII. He argues that this ceremony was revived under the Nicaeans. Secondly, he argues that thirteenth-century Nicaea is already known to have nurtured an environment where romances were quite popular as eight of the most important romances of the Komnenian and pre-Komnenian period were written under the Nicaeans. Thirdly, the *realia* in the text best fit the context of the Nicaean state. *LR*, 52-55. Lendari argues that the shield-raising ceremony is first mentioned in the Palaiologan texts "and can therefore be equally used for a later as well as an earlier dating." Lendari, 68. She does not deem Agapitos' second argument convincing and does not engage with his third argument. I do not find her first argument against Agapitos convincing, as an important portion of historical texts and documents on the Nicaean state and emperors come from authors who wrote under the Palaiologan emperors. The two authors who mention the shield-raising ceremony, Akropolites and Gregoras, are part of our primary sources for the thirteenth century and the fact that they both present the shield-raising ceremony as first taking place under

more convincing arguments for a Constantinopolitan setting and a fourteenth-century-dating are produced, however, I will use its evidence to assume that the romance illuminates the later-Nicaean context.

The references to Egyptian kings and “Saracen” magicians, alongside Latin/Frankish princes (the main character, no less!), are important signifiers of the historical context of the romance. In fact, the eastern and western connections in the text are visible both in terms of the social interactions as well as the economic relations the Nicaean markets established with the outside world. Certainly, in terms of textiles, as we will see below, both the Egyptian/Syrian and the Italian textiles were easily available to the Nicaeans who were able to afford them. This too is true of the world imagined by the author of *Livistros and Rodamne*. For example, a *pittakion* (a note, a letter) that Livisitros sent Rodamne containing a song about a youth courting a beautiful lady contains interesting allusions to courtly dress codes. In the song, the horse the woman sits upon is covered in purple silk, “burning like fire,” while the woman wears a beautiful “Latin” dress and a golden purple Frankish *soukania* over it that glistens with many colors as it sways on the ground. She also has a parrot (indigenous to India) in her hand uttering human words.³²² The same text refers to scarlets brought in by a

Theodore II Laskaris in 1254 is, in my view, a piece of evidence that is in favor of a Nicaean setting rather than a Constantinopolitan one.

³²² *Ibid.*, lines 2308-2310: “Λατίνικα τὰ ροῦχα τῆς ἤτασιν τῆς ὡραίας, ἐπάνω χρυσοκόκκινον ἐφόρει σουκανία, μακρέα εἰς γῆν ἐσύρετον λαμπροχρωματισμένη.” Agapitos writes that *soukania* is a type of

merchant from Babylon who trades in all kinds of luxury “stuff” as Livistros finds out when he goes out of his palace with his lover.³²³ Given that Babylon corresponds to

Frankish dress for women with exaggerated wide arms and cuffs worn above the main dress. *Ibid.*, 492. The word is likely derived from the French “soutane” which is the source also for the Italian “sottana” and the English “skirt.” See, W. Rothwell, “From Latin to Anglo-French and Middle English: The Role of the Multilingual Gloss,” *The Modern Language Review* 88.3 (1993), 593. G. S. Lane, “Word for Clothing in the Principal Indo-European Languages,” *Language* 7.3 (1931), 27. The closest Indo-European equivalent of σουκανία for which the only attested reference comes from the LR in the TLG, are “suknja” in Serbo-Croatian and “suknia” in Polish. See, Lane, *op.cit.*, 27. Both Rothwell and Lane argue that the Italian word is borrowed from the French and not vice-versa. Maurice Leloir, (quoted in the *Trésor de la langue Française* vol. 15 (Paris, 1992), 390, available also on-line: <http://atilf.atilf.fr/>) without giving a reference writes that “soutane” was a long button-down dress worn by both sexes between the twelfth and the fourteenth centuries. After the fourteenth century it was worn by physicians, and finally, from the sixteenth century on, by priests alone. M. Leloir, *Dictionnaire du costume et ses accessoires* (Paris, 1951), 390. The earliest Italian references to “sottana,” according to S. Battaglia, *Grande dizionario della lingua Italiana*, vol. 19 (Torino, 1998), 562-563, are from the late-fifteenth and sixteenth centuries, which confirms Rothwell and Lane’s arguments regarding the term’s French origins. Of the five manuscripts of the LR, the Naples manuscript has *μαντίλον* (from *μαντέλλιον*, a cloak or mantle, not to be confused with *μανδήλιον*, napkin) instead of *σουκανία* which both the Paris (mid-fifteenth century) and the Leiden (sixteenth century) copies have. LR, 345. The fifteenth-century Vatican manuscript does not use this word at all. See, Lendari, 199 (text), 377 (commentary). Neither Agapitos or Lendari comment on the contents of the Escorial manuscript. Parrots are native to the tropical and subtropical southern parts of the four continents. They were imported into Europe from India and Africa before 1492, and from South America and Australia, New Zealand after. In Western medieval literature parrots are associated with the exotic and luxury, of the kind that would accompany emperors, kings and popes. One example, among many, comes from the *Echasis captivi* (ca. 1229) a Christian fable, in which the parrot is one of the king’s (i.e. lion’s) boastful birds. See, J. Ziolkowski, *Talking Animals. Medieval Latin Beast Poetry 750-1150* (Philadelphia, 1993), 153, 186-189. The merchant classes began owning parrots in London in the sixteenth century, and many parrots were raised in England then, while some were still imported from the tropics in that century. See, B. T. Boehrer, *Parrot Culture: our 2,500-year-long Fascination with the World’s Most Talkative Bird* (Philadelphia, 2004), 23-49, 56-57.

³²³ LR., lines 2664-2668:

“μὲ εἶπε, “πράγματα, χρυσάφιν καὶ λιθάριον, /μαργαριτάριν καὶ βλαττίν, σκαρλάτα, χαμουχάδες” / Ἐχεις λιθάριον”, εἶπα τον, “πραγματευτά, νὰ ἐπάρω;” /

Ἐχω πολλὰ παράξενον καὶ δάον τῆς κυρᾶς μου...” The prince is certainly interested in the most exotic of the precious stones which the merchant claims to carry. According to Trapp (κ)χαμουχᾶς is a Persian word (kemhā) designating a gold brocade garment. Monnas seems correct in claiming that the word comes from Fujian “kim hua” (golden flowers). Monnas, “The Price of Camacas Purchased for the English Court during the Fourteenth Century,” S. Cavaciocchi, ed., *La seta in Europa, secc. 13-20* (Prato, 1993), 742. The reference to this type of luxury garment in Livistros and Rodamne is one of the first; regardless of its origin it is first used in Byzantine literature in the thirteenth century and remained in use through the fifteenth century. The term appears eleven times in the TLG. Achilleis romance (fourteenth century), Romance of Belisarios (fourteenth century), George Sphrantzes (fifteenth century, while its

eastern part of Greater Syria (roughly modern Iraq) in contemporary texts,³²⁴ not only does this Syrian/Iraqi/Babylonian merchant sell scarlets but also *xamouxas*, alongside purple silk, gold, pearl and precious stones.³²⁵

expanded, revised version, the so-called Pseudo-Sphrantzes, mostly repeats the former. The revision of Sphrantzes's work was made by Makarios Melissenos in the sixteenth century), are others. V. L. Konstantinopulos and A. C. Lolos, *Zwei mittelhochdeutsche Prosa-Fassungen des Alexanderromans*, (Königstein, 1983), vol. 2, 126. 5; W.F. Bakker and A. F. van Gemert, *Ιστορία τοῦ Βελισσαρίου* (Athens, 1988), 414, 617; V. Grecu, *Georgios Sphrantzes. Memorii 1401-1477*, 13.4; *Xamouxas* is very often mentioned in the same context together with *chasdion* and purple silk (*blattion*). The fact that the *xamouxas* in LR is sold by a Syrian merchant does not necessarily mean that it was made in Syria. The inventories of the Pisan cathedral (dated 1369 and 1394 respectively) mention "camucas de Romania" which suggests that this brocaded, patterned expensive type of silk was manufactured in the region: Barsotti, *Gli Antichi inventari della cattedrale di Pisa*, 55-56, 82. Sphrantzes, for example, mentions *xamouxas* from Lucca of green *tzochas*, and *skoufia* (head dresses) from Thessalonike of gold/red *chasdion* which Constantine XI sent him as ransom alongside gold: "ὥς ἀπὸ τῆς θούρας εἰς τὴν κατοῦνάν μου, ἔφερόν με εὐεργεσίαν αὐτοῦ **ταμπάριον** (see n. 325 below) διπλὸν χαμουχᾶν πράσινον ἀπὸ τὴν Λούκκαν ἀξιόλογον, μετὰ καὶ πράσινης τζόχας καὶ καλῆς ἐνδεδυμένην, **σκοῦφίαν** Θεσσαλονικίαν μετὰ χρυσοκοκκίνου χασδίου ἐνδεδυμένην, καβάδι χρεμετῆν χαμουχᾶν μετὰ βαρέου καταράχου ἐνδεδυμένην, **κουρτζουβάκιν** (short hose, breeches. See above p. 470) χαμουχᾶν χρυσὸν προῦσινον καὶ φωτᾶν προῦσινον καὶ σπαθὶν ἐγκεκοσμημένον." See, V. Grecu, *Georgios Sphrantzes. Memorii 1401-1477*, 19. 4.

³²⁴ Neophytos Inklusos writes, "Καὶ ὁ ἐν Αἰγύπτῳ καὶ Βαβυλῶνι καὶ Περσίδι αἰχμάλωτος λαός": Th. Detorakes, "Ἑρμηνεία τοῦ ψαλτῆρος," in I. Karabidopoulos, C. Oikonomou, D. G. Tsames, and N. Zacharopoulos, eds., "Ἀγίου Νεοφύτου τοῦ Ἐγκλείστου," *Συγγράμματα 4* (Paphos, 2001), 531-559, Psalm 119, line 9; thirteenth-century chronographer Joel: "ὅν ὁ Ἀλέξανδρος [Alexander the Great] χειρωσάμενος παρέλαβε πᾶσαν τὴν βασιλείαν αὐτοῦ καὶ πᾶσαν τὴν Περσῶν καὶ Μήδων καὶ Πάρθων καὶ Βαβυλωνίων χώραν καὶ τὰ Ἰνδικὰ πάντα μέρη." I. Bekker, *Ioelis chronographia compendiaria* (Bonn, 1836), 7.

³²⁵ LR, 2664-2668; According to the TLG this word is newly used for the first time in the thirteenth century even though it is possibly of Persian origin (Trapp, vol. 4, 755). Note, however, that Persian origin does not imply that it was made only in Iran; Sphrantzes refers to green "xamouxas from Lucca." See V. Grecu, *Georgios Sphrantzes. Memorii 1401-1477*, 19. 4. *Tamparion*, an outer garment or cloak that possibly is derived from the Italian *tabarro*, is used first in the fourteenth century, in both the *Pseudo-Kodinos*, 143, 148, 153, and the fourteenth-century remake of Alexander the Great's legend, which mentions a φοινικιώτικον ταμπάριον: G. Veloudis, *Ἡ φυλλάδα τοῦ Μεγαλέξαντρου. Διήγησις Ἀλεξάνδρου τοῦ Μακεδόνα* (Athens, 1977), 137.11 [TLG 1386.016], description of Alexander's clothes which distinguished him from Darius. Also see, Parani, *Reconstructing the Reality of Images*, 64. Σκούφια (Ital cuphia or [s]cuffia, Trapp, vol. 7, 1574) is first used in 1384 in documents from Athos (N. Oikonomides, ed., *Actes de Docheiariou. Archives de l'Athos* 13, (Paris, 1984), vol. 1, 263-265, line 27) and remained in use through the fifteenth century as evident from a reference in Sphrantzes quoted above. Σκαλτζα or κάλτζα "sock" (It.

If the romance is any guide, then, luxury clothes were imported from Egypt, Syria, Italy and the West into the State of Nicaea. The silk-producing areas across the Aegean should not be excluded either. The Frankish coverlet (*sindone*), the “Latin” garments (*soukania* and *roucha*), and the “Frankish” belts might just as well come directly from across their Aegean neighbors. But there was a lively textile industry in Nicaea as well. This is partially indicated by Theodore II Laskaris’ important remark on Thessaly as a region where weaving is the favored *techne*, namely, craft or industry, whereas, in Philadelphia it is the art of tanning/shoe-making (*skuteutikon*) and in Nicaea it is philosophy.³²⁶ Coupled with the much more explicit passage in Theodore Metochites’ oration to Nicaea, Blemmydes’ reference might put on more meaning. Metochites wrote that the city served as a shelter not only for Constantinopolitan refugees, but it also harbored the Constantinopolitan *technai* (crafts) after the capital’s capture in 1204. Even though Jacoby and Laiou disagreed over the correct interpretation of the paragraph,³²⁷ in view of what we have discussed above, I believe that it is more than simply a rhetorical trope when Metochites specified that “Nicaea not only

calza, Trapp, vol. 7, 1574) first appears in the early thirteenth century as it is used in Chomatianos and also in the dictionary of Pseudo-Zonaras. See, Chomatianos, *Ponemata*, 19. 86 and J. A. H. Tittmann, *Iohannis Zonarae lexicon ex tribus codicibus manuscriptis*, vol. 2, 1224. On the context in Chomatianos see p. 473 above.

³²⁶ PG 140, 1345. The fact that Theodore II does not mention anything about textiles (or any other industry) contradicts with what Metochites wrote on Nicaea.

³²⁷ Jacoby, “The Jews and the Silk Industry of Constantinople,” in *idem.*, *Byzantium, Latin Romania and the Mediterranean XI* (Aldershot, 2001), 18-19. A. Laiou and C. Morrisson, *The Byzantine Economy* (New York, 2007), 190 n. 55: “D. Jacoby’s assertion that Nicaea produced silk textiles into the Palaiologan period is based on the forced interpretation of a text which speaks only of ‘the art of weaving...at its finest’.”

provides all of the [empire's] needs, but also adorns the [whole] empire by the art of weaving, which is at its best here alone."³²⁸ While the text does not explicitly mention silk weaving, the reference to excellence implies high value textiles, of whatever material.

We have already referred to the Frankish belt-pair mentioned in the testament of Maximos from Boreine in Philadelphia from the middle of the thirteenth century, and the "Egyptian" *panion* listed among the properties of Ioannikios Achouraites of Berroia which were illegally appropriated by his elder brother Constantine.³²⁹ Extolling the age of plenty under the Nicaean emperors, in a paragraph referring specifically to Magnesia, Theodore Skoutariotes writes that everything was available in the city then, and things unavailable locally were brought in from distant lands, be it "Egypt or India or elsewhere."³³⁰ The parrot mentioned in Livistros and Rodamne could have come only from the latter in the thirteenth century; readers and listeners of this romance were likely familiar with such exotic birds, which could only have been brought to the state of Nicaea via long-distance trade.

³²⁸ Slightly different translation than C. Foss ed. and trans. *Nicaea: A Byzantine Capital and Its Praises. With Speeches of Theodore Laskaris in Praise of the Great City of Nicaea* (Brookline, 1996), 190-193.

³²⁹ For both the belt-pair and the *panion* see above p. 501 and p. 470 respectively.

³³⁰ Skoutariotes, 33, lines 41-46 "...ἐν δὲ τῇ κατὰ Λυδῖαν Μαγνησίᾳ, ὅπου καὶ τὰ πλείω τῶν χρημάτων ἀπέθετο, τί τίς ἂν ἐζήτησεν ἀφ' ὧν ἄνθρωποι χρῆζομεν, καὶ οὐχ εὐρῶν ἐκληρώσατο τὴν ἀπόλαυσιν, οὐ τῶν ἐν τοῖς ἡμετέροις τόποις εὕρισκομένων ἀλλὰ καὶ ὅσα ἐνιαχοῦ τῆς οἰκουμένης, κατ' Αἴγυπτον φημι καὶ Ἰνδῖαν καὶ ἀλλαχοῦ;" Also see, Part 3, n. 312 above on similar comments on Magnesia by Theodore II.

For perhaps the most significant evidence on the availability of foreign products in the Nicaean state, luxury textiles specifically, we shall turn to Nikephoros Gregoras' statement on the reign of John III Vatatzes. Gregoras lists the rigorous measures the emperor took to fill the state's coffers. First, when there was famine (ca. 1244) in Turkey, the Turks emptied out all their wealth "in silver, gold and clothing" into his empire in return for grain; Roman households were then filled with "barbarian" goods and the imperial treasury was bursting with money.³³¹ The second measure Vatatzes took involved "locking up" the state's internal wealth at home by not allowing the leading *archontes*, wealthy citizens (whom the lesser citizens, he implies, would have emulated), to buy clothing produced in Syria, "Assyria" (Mesopotamia, Iran?), and Italy, but by compelling them to purchase what was produced at home by local hands.³³² These two

³³¹ Gregoras 1, 43 lines 1-3: "καὶ ἐκενοῦτο σὺν ἀφθονίᾳ μακρᾶ πᾶς ὁ τῶν Τούρκων πλοῦτος ἐς τὰς Ῥωμαίων δεξιὰς, ὅσος ἐν ἀργύρῳ καὶ χρυσῷ, ὅσος ἐν ὑφάσμασι..." lines 6-9: "καὶ τοῦτω τῷ τρόπῳ τάχιστα οἱ Ῥωμαίων οἶκοι πλούτου βαρβαρικοῦ πλήρεις κατέστησαν, πολλῶ δὲ πλέον τὰ βασιλικὰ ταμεῖα ἢ τῇ τῶν χρημάτων ἔβριθον δαψιλείᾳ." The passage implies that Turkish clothes were also sold in the Nicaean market.

³³² Gregoras 1, 43 lines 17-24: "But there is something else. Because he saw Roman wealth being wasted in vain on garments imported from foreign people, as many as Babylonian and Assyrian silk craftsmanship produces in different forms and Italian hands weave beautifully, he issued a law [stipulating] that none of his subjects would use those garments (if anyone, whoever that person may be, would not wish to comply, he and his kin would be dishonored), but should use only the garments that the Roman soil produces and the Roman hands make. For the consumption of necessities remains unchanged, but that of things possible to consume [rather than necessary for survival] follows the tastes of those in power; and what is decided by those in power is law and honor for them. So there one could see that those things [the foreign garments] were "consigned to doom," the standard for nobility was confined to the clothes of the Romans, and wealth was flowing "from one home to another," as the common saying goes." "ἕτερον δὲ, ἐπειδὴ ἑώρα τὸν Ῥωμαϊκὸν πλοῦτον μάτην κενούμενον ἐς τὰ ἐξ ἀλλοδαπῶν ἔθνων ἐνδύματα, ὅσα τε ἐκ Σηρῶν Βαβυλώνια καὶ Ἀσσύρια ταλασιουργίαι ποικίλως δημιουργοῦσι, καὶ ὅσα χεῖρες Ἰταλῶν εὐφυῶς ἐξυφαίνουσιν, ἐξήνεγκε δόγμα, μηδὲνα τῶν ὑπηκόων χρῆσθαι αὐτοῖς, εἰ μὴ βούλοιτο, ὅστις ποτ' ἄρ' εἶη, αὐτός τε καὶ γένος ἄτιμος εἶναι· ἀλλ' ἢ μόνοις τοῖς ὅσα ἡ Ῥωμαίων γῇ γεωργεῖ καὶ αἱ

measures were targeting increasing local revenue by protectionism which an economic policy of Vatatzes's. On the other hand, the second measure also indicates that, first, Syrian, "Assyrian," and Italian textiles were flooding the market, but what is more, they were quite appealing to the local *archontes* who could afford to buy them. Vatatzes' laws are solid evidence for the growing consumerism in the Nicaean society, not unlike that which sumptuary laws in Italy seem to have targeted earlier.³³³ Second, since the emperor could compel the citizens to buy local garments, we can be confident that they were produced and available locally. It is also possible to argue that either the quality or the appeal (or both) of these foreign garments were higher because the citizens had to be "locked in" to buying clothing made in the state of Nicaea.³³⁴

Equally important is the regulatory aspect of Vatatzes' legislation, which may have been influenced by the sumptuary laws in Europe. In Italy, the earliest sumptuary

Ῥωμαίων ἀσκούσι χεῖρες. τῶν γὰρ ἀναγκαίων ἢ χρησίσ ἐστιν ἀμετάβλητος, τὰ δὲ ἐνδεχόμενα ταῖς τῶν ἀρχόντων ἀκολουθοῦσιν ὀρέξεσι· καὶ τοῦτο νόμος αὐτοῖς καὶ τιμὴ, ὃ τοῖς ἄρχουσι δεδογμένον ἐστίν· ὥστε κἀνταῦθα ἦν ἰδεῖν, ἐκεῖνα μὲν ἐν Καρὸς καταστάντα μοῖρα τοῦ λοιποῦ, τὸν δὲ τῆς εὐγενείας ὄρον ἐν τοῖς τῶν Ῥωμαίων ἐνδύμασι περικλεισθέντα, τὸν δὲ πλοῦτον οἴκοθεν οἴκαδε, τὸ θρυλλούμενον, φερόμενον." I would like to thank Prof. Angelov for clarifying the ambiguous proverb ("ἐν Καρὸς μοῖρα") which goes back to Homer's *Illiad*, and for his alternative translation of the paragraph. For the German translation (where the translation of the proverb and the general sense of the paragraph are comparable to the above translation) of and commentary see J. L. Van Dieten trans. and ed., *Nikephoros Gregoras. Rhomäische Geschichte* (Stuttgart, 1973), vol. 1, 224, n. 66.

³³³ M. Muzzarelli, "Reconciling the Privilege of a Few with the Common Good: Sumptuary Laws in Medieval and Early Modern Europe," *Journal of Medieval and Early Modern Studies* 39. 3 (2009), 597-612; *eadem.*, "Le leggi suntuare," *Storia d'Italia: Annali*, vol. 19, *La moda* (Torino, 2003), 185-220.

³³⁴ This paragraph comes right after the section on the flow of Turkish wealth into Nicaea. Gregoras is clearly praising John III for keeping the wealth of the nation inside and allowing it to circulate from "door to door" in Nicaea.

law, Genoa's *Breve della campagna* (1157), dates from the middle of the twelfth century, although the proliferation of these laws took place in the thirteenth century and onwards.³³⁵ John III's measures, however, may be unique to the thirteenth century, as sumptuary laws similar to his, aimed specifically at preserving revenue and protecting the local industry, were enacted in Italy later, during the fourteenth and the fifteenth centuries.³³⁶ Content-wise too, there are significant differences between Italian sumptuary laws and those enacted by John III. Unlike the former, John III's legislation was targeting the consumption habits of *all* of the Nicaean population, "whoever that person might be," who were interested in buying foreign; he did not exempt a specific group within the aristocracy. It is important to note, therefore, that Gregoras, who wrote around the middle of the fourteenth century, and might well have been aware of Italian laws, may have been implying that John III's legislation was similar to contemporary Western sumptuary laws (which exempted the highest layers of the aristocracy) but was applied quite differently—hence Gregoras' emphasis "whoever that person may be," to underscore its relative "universalist" application of John III's legislation. One should recall the passage from another the fourteenth-century author,

³³⁵ C. K. Killerby, *Sumptuary Law in Italy 1200-1500* (Oxford, 2002), 24.

³³⁶ In this sense Vatatzes' legislation is not unlike the law passed in Venice in the second half of the fifteenth century which required all public officials to wear clothes of Venetian manufacture only. Killerby, *op. cit.*, 48-49. Muzzarelli argues that the sumptuary laws became an integral part of the legislature in Italy in the second half of the thirteenth century. Muzzarelli, "Le leggi suntuaire," 187-189.

Pachymeres, in which John III berated his own son for his excessive consumption habits.

By contrast, in Venice for example, the doges were exempt from abiding by that city's sumptuary laws.³³⁷ Unlike the Western sumptuary laws, Vatatzes' legislation did not attempt to single out specific social groups, or women, but attempted to control everyone's conspicuous consumption habits. Vatatzes' law was therefore economic in nature and targeted all of the aristocracy, because they were wasting Roman wealth on foreign clothes.³³⁸ The passages above have discussed this remarkable development—the first period when Italian and French goods were flooding the Nicaean market alongside the eastern goods, and John III's firm reaction against it. It seems that both Gregoras and Pachymeres perceived that John III's policies stood out among those of his contemporaries and successors. This emperor seems to have been particularly protective of the local industries and restrictive of the consumption habits of his subjects. I believe that we have seen the traces of his policies even in the archaeological

³³⁷ Killerby, 84. Same observation can be made for France under Philip in the 1270s as it exempted the top aristocracy: "No one neither duke nor count nor prelate nor baron nor others, whether cleric or layman, may have more than four sets of fair-lined clothes in a year, nor any such cloth that costs more than 30 *tournois couds* for Parisian *aune*, if he doesn't have more than 7,000 *tournois* pounds of land revenue..." S. G. Heller, "Limiting Yardage and Changes of Clothes. Sumptuary Legislation in Thirteenth Century France, Languedoc and Italy," in J. Burns, ed., *Medieval Fabrications. Dress, Textiles, Clothwork, and Other Cultural Imaginings* (New York, 2004), 128. Also see, D. Owen Hughes, "Sumptuary Law and Social Relations in the West," in J. Bossy, ed., *Disputes and Settlements: Law and Human Relations in the West* (Cambridge, 1983), 69-99; G. Jaritz, "Kleidung und Prestige-Konkurrenz: Unterschiedliche Identitäten in der städtischen Gesellschaft unter Normierungszwängen," *Saeculum* 44 (1993), 8-31.

³³⁸ See Part 3, n. 332.

record. I mean, specifically, that the paucity, or the sheer lack of foreign coins, and the proto-maiolica ceramics, in western Asia Minor may have been the result of this ruler's intentional policies which were hailed as wise and pertinent by the historians of the fourteenth century.

Conclusions to Part 3

Even the examples are not as plentiful as one would hope, the sources we have discussed above, all together suggest very strongly that the eastern imports into the Byzantine successor states were still significant in the thirteenth century, as they had been during the twelfth century and previously. The sources are infrequent but consistent regarding this point. The Egyptian cloth mentioned in Chomatianos; Gregoras and Skoutariotes specifying Egypt, Syria (Babylon), and Seljuk Turkey, as destinations from which goods and clothes were brought into Nicaean markets, prove this point.

What was new in the thirteenth century is the intensified presence of Western—specifically Italian and French—luxury garments in the same Nicaean markets that were previously dominated by the textiles coming from the East. The references to Frankish belts, the Latin dresses, scarlets are rare and therefore valuable signs of this new development from the Byzantine sources themselves. Gregoras and Pachymeres' references to the reign of John III evince this ruler's discontent with the Nicaean

aristocracy's interest in buying Syrian, Egyptian, Turkish, Frankish, Latin clothes and his policy of curbing the local demand for these foreign luxury garments. All of these references also underscore that at least during the reign of John III, luxury garments were locally produced in Nicaea. What portions of these Nicaean textiles were exported, if any, remains largely unknown.

Of course the presence of foreign textiles by itself need not necessarily eradicate the local industry and its capacity to export; after all, the presence of eastern textiles in earlier centuries had not done so. In the case of Byzantine textiles' competitive edge *vis à vis* western textiles exactly this inability to compete and export seems to have been the ultimate result, even though the process by which this came about is not entirely clear. One could ascribe this outcome fundamentally to the Byzantines' inability to keep up with the technological innovations that required increased specialization from its textile workers, or to innovate anew. By the middle of the fourteenth century, John VI Kantakouzenos did not offer locally manufactured silks to foreign embassies as gifts. Instead he offered them luxury Italian wool.³³⁹ Regarding the fifteenth century,

³³⁹ Gregoras 2, 600: "Τῶν δὴ τοιούτων ἐπὶ τοιαύτῃ καταστάσει συνενεχθέντων, τὴν ταχίστην αὐθις ἐξήει τοῦ ἄστεος ὁ Καντακουζηνός, σὺν πολλῇ τῶν οἰκοθεν χρημάτων παρασκευῇ καὶ ὅσα πρὸς δωρεὰς φιλοτίμους τῶν προσιέναι μελλόντων αὐτῷ παντοδαπῶν ἐθνῶν ὁμοῦ καὶ πρεσβευτῶν καὶ πόλεων παρεσκεύαστο ἔπιπλά φημι καὶ χλαίνας Ἰταλικάς ἐξ ἐρίου, καὶ ὅσα ἕτερα μακρὸν τὸ φιλότιμον ἔχουσι τῶν χαρίτων." Also see Van Dieten's comment in Van Dieten, vol. 3, 254. John VI Kantakouzenos left Constantinople for Didymoteichon in preparation for his campaign for the regency of emperor John V against the latter's mother, empress Anna of Savoy, Alexios Apokaukos and Patriarch John IX Kalekas in 1341 following Andronikos II's death. The Italian garment and the other gifts he prepared would go to future embassies of nations and cities.

Matschke and Kislinger both point to explicit instances where Cardinal Bessarion, Gemistos Plethon, and Demetrios Chrysoloras indicate that the Byzantines were not producing luxury textiles any longer but were completely dependent on foreign exports at that time.³⁴⁰ Cardinal Bessarion, in a letter to emperor Constantine XI Palaiologos, categorized the importance of establishing eight specific industries in the Peloponnese given its resources, among which he cites silk cloth production (*serikon*) and wool garment production (lit. “garment-making from wool”) as well as dyeing for both the industries.³⁴¹ George Gemistos Plethon underscores the importance of the ability to manufacture the end-product and not be dependent on foreign goods, which, without the protective wall of taxation, drain the national resources. Regarding the Peloponnese he writes that the land needs nothing from the outside, except for ‘silver and weapons,’ which can easily be exchanged for cotton. Yet, he adds, the fact that “we need clothes from the outside is utterly irrational,” and that even though wool, cotton and flax are grown in the Peloponnese “we cannot process (*φιλοτεχνεῖν*) them.” The raw products are thus used by the nations north of the Ionian Sea who are able to make garments

³⁴⁰ Matschke, 52; E. Kislinger, “Gewerbe im späten Byzanz,” *Sitzungsberichte Österreichische Akademie der Wissenschaften. Phil. Hist. Klasse* 513-514 (1988), 103-126.

³⁴¹ See, L. Mohler, *Kardinal Bessarion als Theologe, Humanist und Staatsmann* (Paderborn, 1942), vol. 3, 448: “Ταύτας τέτταρας τέχνας, ἄριστε δέσποτα, μηχανικὴν, σιδηροποιητικὴν, ὀπλοιοποιητικὴν καὶ ναυπηγικὴν, ὡς ἀναγκαίας τε καὶ χρησίμους τοῖς εὖ ζῆν ἐθέλουσιν,.... εἰσὶ μέντοι καὶ ἄλλαι τέτταρες ἀξίαι λόγου, ἡ τοῦ ὑλίου, ἡ τῶν σηρικῶν, ἡ τῶν ἐξ ἐρίου ποίησις ἱματίων καὶ προσέτι ἡ τούτων ἀμφοτέρων βάφη, περὶ ὧν ὅμως, ὡς οὐ πρὸς ἀνάγκην, ἀλλὰ πρὸς τρυφὴν καὶ διαγωγὴν μᾶλλον ἀνθρώποις ἐξευρημένων, οὐ πολὺν λόγον ποιοῦμαι πρὸ τοῦ τῶν ἀναγκαίων τυχεῖν.” Also published in S. P. Lampros, *Παλαιολόγεια καὶ Πελοποννησιακά* (Athens, 1930), vol. 4, 44.

with the raw materials they bring in from beyond the Atlantic. According to Plethon, it would have been so much better if garments were made locally.³⁴² Finally, Cardinal Bessarion's letter to Constantine XI Palaiologos quoted above, recommending the emperor to send Greek youths abroad to learn silk and wool weaving, dyeing and garment-making, and eventually establish these industries in the Peloponnese, is firm proof that in his eyes these industries did not exist in Greece.³⁴³ The contrast between this era and the period near the end of the eleventh century and particularly the twelfth century when the weaving industry in Boiotia and the Peloponnese had become a much-attested actuality, is remarkable. The Byzantine luxury textile industry arguably still retained its capacity to produce and export luxury textiles until roughly the middle of the thirteenth century, as much as we can tell from the references in western church inventories and from the internal references to local production. Under the Nicaeans there still was a relatively healthy textile industry, which at least John III found worthy of protection. Yet the thirteenth century is also the century when we first hear about the influx of western (mostly Italian) textiles in Byzantine writings in addition to eastern textiles. It was the exponential development of the Italian and Western textile industries

³⁴² PG 160, 837. 22: "Περὶ τῶν ἐν Πελοπόννησῳ πραγμάτων:" "Τῶν γὰρ ξενικῶν τούτων ἔσθλητων πολλὴ ἀλογία καὶ δεῖσθαι. Οὐ γὰρ σμικρὰ πού κακία πολιτείας, παρόντος δὲ λίνου, οὐσης δὲ βύσσου, ὄντων δὲ βαμβακίνων, μὴ τούτοις τὰ περὶ τὴν ἀμπεχόνην οὕτως ὅπως ἂν δυνώμεθα φιλοτεχνεῖν. ἀλλὰ τῶν ἔξωθεν μὲν ἐκ τοῦ Ἀτλαντικοῦ πέλαγους κομιζομένων ἐκείνων ἐρίων, ὑπὲρ δὲ τὸν Ἰόνιον εἰς ἔσθλητα σκευαζομένων, δεομένοις φαίνεσθαι. Ὡς πλέονι ἂν καλλίου; τῷ ὄντι ἡμεν τοῖς ἐπιχωρίοις τούτοις χρώμενοι, καὶ αὐτάρκως τὰ περὶ τὴν ἀμπεχόνην ἔχοντες, ἢ ὅσῳ καλλίων ἂν δόξειεν ἴσως ἢ ξενικὴ αὕτη ἔσθλης, τῆς ἐπιχωρίως ἂν σκευασθῇσόμενης."

³⁴³ See above, n. 341.

(both luxury and non-luxury) throughout the thirteenth and the fourteenth centuries that finally brought about collapse of the Byzantine textile industry. The Byzantine high value textile industry apparently failed to compete successfully with either the lower price or the higher quality of its products, or perhaps both. The beginning of the economic decline and subordination of the previously successful Byzantine textile industry took place around the middle of the thirteenth century. This chapter and the one preceding it have offered convincing new evidence on when it began.

CHAPTER 11

Why Study Trade in the State of Nicaea? On Local Production and International Trade in the State of Nicaea

The evidence on Nicaea's involvement in international and interregional trade is scanty, and at best indirect. The first three parts of this dissertation have provided new evidence on Nicaea's protectionism and on the commercializing of its industrial goods. Concerning its trade, Part 2 argued that the state of Nicaea was the primary producer of the Zeuxippus wares which were exported to Europe and the Middle East up until the middle of the thirteenth century. In addition, Part 3 discussed the evidence on the existence of a textile industry that met a certain, unknown, portion of the local demand. Nicaean textile industry's export capacity, unlike that of its fine ceramic industry, is also largely unknown.

Concerning the Nicaean state's protectionism, Part 1 suggested that the Nicaean state had established a monetary policy that restricted the circulation of foreign issues; Nicaeans may have reminted foreign coins. This interpretation of Nicaean monetary policy is new. Regarding the extent of Nicaean protectionism, Part 2 underscored the significance of the absence of Italian proto-maiolicas from areas under Nicaean control. The suggestion that the Nicaean state protected its fine ceramic industry, coupled with the discussion of the international extent of the trade in Zeuxippus wares, also brings a heretofore unknown and undiscussed aspect of Nicaean ceramic industry into attention. Even though indirect and scarce, the documentary evidence discussed below attempts

to put the written evidence on Nicaean trade, industries, and especially protectionism, into a broader perspective in light of the evidence provided by the first three parts in this dissertation. Building upon the previously discussed archaeological and documentary evidence, this final chapter will first discuss the scholarship on Nicaea's commercial relationships in the eastern Mediterranean world after the Fourth Crusade. It will then propose an interpretation of the documentary evidence, re-analyzing the extent of Nicaea's commercialization of its industrialized goods in particular, as well the extent of its commercial protectionism. This interpretation is not necessarily new but I offer a fresh analysis of the documentary sources in view of the new archaeological evidence discussed in this dissertation.

It is significant that in Nicaea we encounter the last Byzantine state that exported its fine ceramics to Europe and the Middle East. It is also the last Byzantine state that retained the capacity to export fine textiles outside its borders. By focusing on the Nicaean state this chapter highlights a Middle Eastern polity trying to come to terms with the internationalism of the eastern Mediterranean world after 1204 and struggling to keep its local industries alive in the face of the ubiquity of increasingly more successful competitors and their attractive goods. The battle was ultimately lost to the Europeans particularly because of the progress Europe's own industries made at a time when Europe, in addition, had direct access to the industrialized goods of the Middle and the Far East thanks especially to the Mongols.

The general consensus regarding the economic condition of the state of Nicaea is that it was a prosperous, agrarian state protective of its local industries.¹ During the approximately fifty-five years of its existence the Nicaean state was ruled by four rulers, among them the first two, Theodore I Laskaris (1205?-1222) and his son-in-law John III Vatatzes (1222-1254) served the longest, while Theodore II Laskaris (1254-1258) and his son John IV Doukas Laskaris (1258-1261)² ruled only for about four and three years respectively before Michael VIII (1258-1282) transferred the crown to his own progeny – the Palaiologoi – and reinstated Constantinople as the new capital in Nicaea's place. This return to the old capital, according to some scholars, had unintended and unfortunate consequences for the political and economic well-being of the empire since the confined but sustainable prosperity of the Nicaean state could no longer be maintained once the Byzantines retook the capital alongside parts of Thrace and Thessaly.³ Not unlike Michael Angold, Hélène Ahrweiler refers to the state of Nicaea's

¹ M. Angold, *A Byzantine Government in Exile: Government and Society under the Laskarids of Nicaea, 1204-1261* (London, 1975), 102-115; Laiou, "The Byzantine Economy: An Overview," *EHB* 3, 1158; D. Kyritzès and K. Smyrlis, "Les villages du littoral Égéen de l'Asie Mineure au Moyen Âge," in J. Lefort, C. Morrisson, J.-P. Sodini, eds., *Les villages dans l'Empire byzantin* (IV^e- XV^e siècle) (Paris, 2005), 444-445, 448-449. Angold, *A Byzantine Government in Exile*, 102-115.

² According to Morrisson, the Vatatzes preferred to add the name Doukas rather than Komnenos, because they wanted to associate themselves with the Doukai instead of the rival Komnenoi in Trebizond they chose to combine the name Dukas with Vatatzes and Laskaris. C. Morrisson, "Thirteenth-Century Byzantine 'Metallic' Identities," in J. Herrin and G. Saint-Guillain, eds., *Identities and Allegiances in the Eastern Mediterranean after 1204* (London, 2011), 138, 161.

³ Angold, *A Byzantine Government in Exile*, 2-5, 296 and *passim*. More recently, repeated in these words: "paradoxically, the loss of Constantinople made for more efficient government." *Idem.*, "After the Fourth Crusade: The Greek Rump State and the Recovery of Byzantium," in J. Shepard ed., *The Cambridge History of the Byzantine Empire c. 500-1492* (Cambridge, 2008), 739.

blossoming as the last Byzantine renaissance which declined and finally ended calamitously two hundred years after the Byzantines took Constantinople.⁴

Theodore I was the founder of the Nicaean state and first established his power-basis in western Asia Minor, after a few years of struggle to exert himself over the local gentry who formed their own small polities in western Asia Minor by 1204.⁵ During his lifetime Theodore made a number of important agreements with foreign powers including a peace accord concluded in 1219 with the Venetians confirming the latter's tax exemptions. With respect to Theodore, John was at least his equal as a militarily aggressive, confident, and competent leader in his dealings with the neighboring foreign powers. Noteworthy is the fact that from John III's thirty-two year long reign there are no known trading agreements with foreign polities. In economic terms, the lack of evidence on commercial agreements and his portrayals in Akropolites, Gregoras, and Pachymeres as a solemn and austere autocrat urging both the local gentry and his

⁴ Ahrweiler, "L'Histoire et la géographie de la région de Smyrne entre les deux occupations turques (1081-1317), particulièrement au XIII^e siècle," *TM* 1 (1965), 8-11 in particular.

⁵ By 1200 we see the establishment of small "city-states" of local magnates such as that of Sabbas Asidenos who assumed power at Sampson (ancient Priene) near Miletos; Manuel Mavrozomes in the Meander Valley, Theodore Mankaphas in Philadelphia (1188-1205), Leo Gavalas in Rhodes (1204) and a Byzantine educated Italian, Aldobrandini, in Attaleia. Oikonomides surmised that these were dissident areas, already out of Byzantine control before 1204. See, Oikonomides, "La décomposition de l'empire byzantin à la veille de 1204 et les origines de l'empire de Nicée: à propos de la *Partitio Romaniae*," in *idem.*, *Byzantium from the Ninth Century to the Fourth Crusade* (London, 1992), 3-28. On Mavrozomes see, S. N. Yıldız, "Manuel Komnenos Mavrozomes and his Descendants at the Seljuk Court: The Formation of a Christian Seljuk-Komnenian Elite," in S. Leder, ed., *Crossroads between Latin Europe and the Near East: Corollaries of the Frankish Presence in the Eastern Mediterranean (12th -14th Centuries)* (Würzburg, 2011), 55-77.

own family alike to be frugal and to purchase locally produced garments, has led some modern historians to argue that his economic policies were protective, directed at conserving local production. Stelian Brezeanu, for example, writes that John's protectionist policies were unique to his reign. According to this author, John's protectionism was very much an exception and not a characteristic of the Nicaean state.⁶ We are still in the dark whether John was the sole promoter of economic protectionism, but the written evidence certainly points to his reign as the climax of these protectionist policies.

It is also not certain whether this protectionism was a trademark of all of John's long reign which spanned more than half the duration of Nicaean rule. Regardless, in a recent article, Angold wrote specifically that "in the short term," that is, throughout Nicaean rule until the beginning of the reign of Michael VIII, John "seems to have been able to protect his territories from Italian commercial penetration. Despite the respectable number of Italian, particularly Venetian, commercial documents surviving from the period, there are few direct indications of Italian trade with the ports of the Nicaean empire."⁷ Elizabeth Zachariadou echoes the same thought and emphasizes the scarcity of direct evidence on an Italian, specifically Venetian, presence in western Asia

⁶ S. Brezeanu, "La politique économique des Lascarides à la lumière des relations vénéto-nicéennes," *Études byzantines et postbyzantines* I (1979), 44-45, 51-52.

⁷ Angold, *A Byzantine Government in Exile*, 114-117. Same argument recurs in "After the Fourth Crusade," 740.

Minor before ca. 1250, although sources abound after ca. 1300.⁸ This takes us back to the consensus evoked in the opening lines of this chapter that the Nicaea was a state, that at least during the reign of John III, either during all or part of this emperor's reign, was run according to a conservative, protectionist economic policy.

Regarding the agrarian prosperity of the Nicaean state there is little doubt. Laiou and Angold, have noted the existence of a prosperous agrarian economy; they draw attention to evidence on land-clearance and the abundant references to cash crops.⁹ It should be mentioned that some of the strongest evidence for the agrarian nature of the Nicaean economy too comes from the reign of John III, as he is portrayed in Gregoras as a spectacularly frugal emperor who financed his crown by selling the eggs from the local imperial demesne.¹⁰ A similar inference might be drawn from the references, again in Gregoras, to the starving Seljuks trickling in the Nicaean state to buy grain when there was famine in their state in ca. 1244.¹¹ There is enough evidence that Nicaea had enough agricultural surplus. The question, then, surrounds the scope of Nicaean state's commercial activities and commercial connections, in particular, whether or not these

⁸ E. Zachariadou, *Trade and Crusade. Venetian Crete and the Emirates of Menteshe and Aydın (1300-1415)* (Venice, 1983), 3-10.

⁹ Laiou, "Agrarian Economy," in *EHB*, 314, 320. Angold, *A Byzantine Government in Exile*, 102-106.

¹⁰ Gregoras 1, 43.

¹¹ Gregoras 1, 42-43.

activities and connections included the sales of non-agrarian goods.¹² The discussion in Part 3 but especially Part 2 have suggested that Nicaea's wealth derived from the sales not only of eggs and grain but also of fine ceramics, and quite likely, of fine textiles. We have also seen that, at least until the reign of John III, foreign fine textiles and possibly other foreign goods were also available for sales to the locals who had the means to buy those goods.

Thus, despite the abundance of direct evidence on agrarian prosperity in Nicaean lands, there is a relative scarcity of direct evidence regarding the extent of the goods that the Nicaean economy commercialized. Only recently has Jacoby produced important evidence challenging the view that the Nicaean state was not favorable to foreign trade and did not seem to benefit much from the expansion of trading opportunities with foreigners after 1204.¹³ The chapters on ceramic and textile production in Nicaea pose additional challenges to the said view. As we have seen at the end of our analysis of ceramic evidence, Anaia, Milet, Magnesia on the Meander, all within the borders of the Nicaean state, emerged as probable production sites of the Zeuxippus ware fragments which were found in Italy, France and Egypt. Even though

¹² In addition to n. 1124 above, *MM* 4 (Lembiotissa); *MM* 6 (Patmos); E. Vranousi and M. Nystazopoulou-Pelekidou, *Βυζαντινά Έγγραφα της μόνης Πάτμου*, 2 vols. (Athens, 1980). There are about twenty five documents from the Athonite archives on the thirteenth century and a few on the state of Epiros, preserved in *MM* 5.

¹³ Jacoby, "Rural Exploitation in Western Asia Minor and the Mediterranean: Aspects of Interaction in the Thirteenth Century," in preparation. I would like to extend my heartfelt thanks to Prof. Jacoby for allowing me to see his article before publication and for Prof. Angelov for bringing it to my attention.

we have not been able to find direct evidence on the exportation of Nicaean textiles to foreign merchants we have argued that textile production did take place in Nicaea, and that evidence shows, that raw silk was exported from Nicaea to Genoa and/or Lucca definitely in the second half of the thirteenth century, but possibly earlier also during its first half, despite a probable official ban on raw silk exports.¹⁴ This chapter will thus focus on the scarce and indirect written evidence on Nicaea's trade relations with foreign polities. In view of what we know regarding coin circulation, ceramic and high-end textile production in and exports from Nicaea, evidence presented in this chapter will allow us to re-calibrate our observations on Nicaean trade relations with foreign (especially Italian) polities and contextualize its protectionist policies.

With the Fourth Crusade Venice and the French barons took the lion's share of the lands they captured from the Byzantines. After 1204 we do not encounter much information about the Pisans in the sources, except for their agreements with the Venetians and the Genoese. Based on the existing sources Borsari argues that the Pisans followed a policy of rapprochement with the Venetians, Genoese and the Latin Empire against the state of Nicaea up until the 1240s when they shifted alliances and attempted to establish closer ties with John III and his son-in-law, the Holy Roman Emperor Frederick II.¹⁵ Although, according to Borsari, the first instance of Pisans

¹⁴ See above p. 491ff and below p. 545.

¹⁵ S. Borsari, "I Rapporti tra Pisa e gli stati di Romani nel Duecento," *Rivista Storica Italiana* 67 (1955), 487.

mentioned in Greek Asia Minor dates from 1283, the evidence on their dealings with the Seljuks pre-dates the 1260s while a Pisan from Lesser Armenia is spotted in Acre in 1274.¹⁶ Silence about the Pisans in the sources may perhaps not rightly rule out significant Pisan activity in the Nicaean state. The silence in the sources in the first half of the thirteenth century begins to break only in the 1240s; references to Pisan commercial activities in Seljuk Asia Minor and Acre are the only known direct instances from the latter half of the thirteenth century where Pisans receive specific mention. According to Borsari, apart from the rapprochement between John III's ally Frederick II and the Pisans in the 1240s, there are no known references to direct contact between the Nicaeans and the Pisans.¹⁷ Again, according to Borsari, only after the reconquest of Constantinople are the Pisans mentioned again, this time in the 1261 agreement with Michael VIII Palaiologos who made good use of Pisan manpower against the Venetians and later in the 1280s against Charles I. Unlike the Genoese and the Venetians, however, who roamed the empire tax free, the Pisans continued to pay the commercial tax (*kommerkion*) at a reduced rate only, on merchandize they sold within the restored empire.

There is, however, at least one piece of indirect evidence that comes from the state archives of Florence, dated 1245, which mentions the account of two Pisan

¹⁶ Borsari, 486-487.

¹⁷ Borsari, 490-492.

merchants who were in the vicinity of Atramyttion when Gregorio di San Gimignano of Florence “died in the territory of Vatatzes.”¹⁸ This suggests that not only the Pisans but also the Florentines were active in Nicaean territory during the reign of John III. Unfortunately, we are in the dark about the details of their activities. Even though the circumstances surrounding the activities of the Florentines in the state of Nicaea together with Pisan citizens during Vatatzes’s reign is unknown, there is at least one piece of evidence that they were indeed near Atramyttion when the Florentine Gregorio died. We should mention here the Pisan manual of 1278, which mentions Anaia as a port of call which the Pisan merchants seem to have used frequently by 1278 for raw silk and grain exports from western Asia Minor. One wonders how far back the Pisan commercial activities in Anaia went.¹⁹

When the Venetians, the French and the remaining Crusaders partitioned the Byzantine Empire, because they had attempted to prevent the Crusaders from capturing Constantinople in 1204, the Genoese were not allowed trading rights in Latin and Venetian parts of Romania. The Venetians in particular were quite suspicious of rival Genoese activity in the Aegean, all the more given Genoa’s affinity with the

¹⁸ “mortuus apud Lendermite in Romania in terra Bacassari.” R. Davidsohn, *Forschungen zur Geschichte von Florenz* (Berlin, 1896-1908), vol. 2, 295; C. Otten-Froux, “Documents inédits sur les Pisans en Romanie aux XIII^e – XIV^e siècles,” in M. Balard, A. Laiou, C. Otten-Froux, eds., *Les Italiens à Byzance. Édition et présentation de documents* (Paris, 1987), 159; Jacoby, “Rural Exploitation,” 9.

¹⁹ See Part 3, n. 305 above. Jacoby thinks that entries into the manual were progressively added over an extended period of time. Jacoby, “The Pisan Commercial Manual of 1278,” 451-452.

Marquis de Montferrat, who, unfortunately for the Genoese, ended up selling Crete to the Venetians despite pronounced Genoese interest in the island. The virtual “ban” on Genoese trade in Latin and Venetian parts of Romania most likely lasted until 1218 when they were allowed to resume trading and residing in Constantinople as they had done in accordance with the agreements they had made under the Komnenoi, and for the last time with Alexios III Angelos in 1202.²⁰ Despite this agreement, Balard correctly underscores the fact that the Genoese, unlike the Venetians, were traditionally not very active in the Aegean, as historically they had been much more interested in western and southwestern Europe because of their greater proximity and because their ties to these areas were stronger compared to the Venetians, whose historical relationship with the east was deep-rooted.²¹ Nevertheless, the 1218 agreement shows an attempt certainly on the part of the Genoese, possibly at the instigation of former Genoese residents of Constantinople such as the family of Guercius, to establish a footing in the Aegean once again. This attempt seems to have been limited, as we have very little evidence of any Genoese activity in the Aegean except for their presence in Constantinople in 1232. From that Balard argues that between 1218 and 1232—with trade agreements extending

²⁰ These agreements were renewed in 1228 and 1251. Balard, “Les Génois en Romanie entre 1204 et 1261. Recherches dans les minutiers notariaux génois,” *Mélanges d’archéologie et d’histoire* 78 (1966), 467; C. Desimoni, “I Genovesi ed i loro quartieri in Constantinopoli nel secolo XIII,” *Giornale Ligustico* (Genoa, 1874), 217-218.

²¹ Balard, 470-472 with map facing p. 471.

every four-five years—the Genoese were able to establish some kind of an organized presence in that city.²²

What about Genoese presence in the state of Nicaea? All of the evidence concerning the Genoese attempts at establishing amicable relationships with Nicaea comes from the reign of John III, i.e. the period when the Nicaeans were militarily more aggressive and powerful, and they all concern embassies the Genoese sent to Nicaea to negotiate with John. There are two of these references, both recorded in the *Annales Ianuenses*. In 1231 Guido Policinus and the future consul of Syria, Nichola Embriacus, sailed in an armed galley to Nicaea to negotiate and sign a peace agreement with John III.²³ The second reference in the *Annales* concerns another embassy from 1239. This delegation involves John III responding to the previous Genoese committee by sending one of his ambassadors to Genoa, an attempt that in the end came to nothing because, according to the editor of the *Annales*, John III had negative relations with the papacy. The negativity arose from discussions concerning the Creed, particularly, the procession of the Holy Spirit. According to the *Annales*, John III's ambassador gave a long

²² Balard, 479.

²³ *Annales Ianuenses*, 57: “fuerunt legati duo...ad partes Romanie in una galea bene armata cause loquendi et firmandi pacem et conventionem cum Vathatio imperatore Romanie,...”

explanation for why John III could not comply with Pope Gregory IX's position, and abruptly left for Nicaea.²⁴

These negative political exchanges seem to have extended from the negotiations on union of the churches to trade relations. One set of examples that dates from after the reign of both John III and Theodore II supports this position. According to two documents from the Genoese archives, both dated to 1261, popes Alexander IV and his immediate successor Urban IV, request Michael VIII to release two Lucchese merchants captured near Atramyttion and to restitute the merchants' money using the Genoese podesta as intermediary.²⁵ Possibly both of the Lucchese merchants were released at the time of the second document written under Urban IV because only money is mentioned in the second document. This suggests that the pecuniary confiscation remained unpaid, which explains the second document to Michael VIII by Pope Urban IV requesting the restitution of the "great amount of money."²⁶ We should recall the case of Pisans witnessing the death of a Florentine citizen according to the Florentine document of 1245. Since both of these sets of documents (Florentine and Genoese) mention Florentine, Pisan, Genoese and Lucchese merchants in Nicaean territory, specifically in Atramyttion, possibly in relation to some kind of commercial activity, it seems likely

²⁴ *Annales Ianuenses*, 93.

²⁵ S. Dellacasa, ed., *I Libri iurium della Repubblica di Genova* vol. I/4, 478-480; Jacoby, "Rural Exploitation in Western Asia Minor," 9-10.

²⁶ Dellacasa, ed., *I Libri iurium della Repubblica di Genova* vol. I/4, 480.

that the westerners were involved in trade relations within the state of Nicaea. Since confiscations and incarcerations were involved these commercial relationships seem to have been far from cordial at times, although we do not know why the said Lucchese merchants were arrested, and why and when their money was confiscated. As we have already seen concerning raw silk sales from Anaia, Smyrna, Philadelphia and Atramyttion to Pisans, Genoese and Lucchese, the documentation on the activities of Italian merchants in formerly Nicaean territories date from the Palaiologan period, specifically from the late 1270s on.²⁷ In view of the Florentine document from 1245 and the Genoese documents from 1261 one wonders if the later documentation dating from the Palaiologan period do not in fact evince some kind of presence and continuity of western commercial activity under the Nicaeans. That said, especially the Genoese documents suggest that the nature of these commercial relations were not friendly before the reign of Michael VIII. The citizens of Lucca mentioned in the 1261 documents either came to Atramyttion with a large sum of money to buy, or were leaving the town having sold their merchandise, unless they were in transit to some other place. We could interpret this piece of evidence as inconclusive to argue for or against economic protectionism and hostility toward foreign merchants. Gregoras informs us, as we have noted many times before, that under John III, Italian and Middle Eastern textiles were being sold in the Nicaean markets. Fine ceramic finds from Nicaean towns, on the other

²⁷ See pp. 491, 545.

hand, suggest that the Italian maiolicas did not penetrate western Asia Minor.

Furthermore, if trade with the westerners were amicable, continuous and somewhat extensive, one would expect to see more direct evidence of this type of trade in both the written sources and the archaeological record. Yet, we do not see either type of evidence during and following the reign of John III until that of Michael VIII.

Both Theodore I's and John III's attitudes toward the Italians and the French conquerors of former Byzantine lands were equally hostile and contentious. Of course, this general statement needs to be modified insofar as the Nicaean rulers also engaged in many political alliances with the Europeans, not the least of which were entered through marriages.²⁸ Theodore I married his daughter, Eudokia, to Robert of Courtenay, and John III himself married to Constance Hohenstaufen, daughter of Frederick II, who was not, similar to John, on good terms with the papacy or the French or the Italians who supported papal policies. John III's son, Theodore II, extolled his father-in-law Frederick in a funeral oration written after the latter's death in 1250. All of these alliances were certainly formed for the purpose of political gain to ensure stability in a highly precarious period when the state was liable to attacks literally from all quarters. Various texts thus mention diplomatic dealings Theodore I undertook with the Latin Empire, Bulgarians, Seljuks, Armenians and the papacy. Yet only two among

²⁸ Angold, "The Latin Empire of Constantinople, 1204-1261: Marriage Strategies," in J. Herrin and G. Saint-Guillain, eds., *Identities and Allegiances in the Eastern Mediterranean after 1204* (London, 2011), 52.

them are commercial in nature: an undated reference in the annals of Ragusa, and the 1219 agreement with Venice preserved in the Venetian archives.²⁹ The same observation holds true for Theodore's successors until Michael VIII. There are no commercial agreements from the reign of John III, although, numerous references in the sources show the busy diplomatic traffic his reign was famous for. John III made agreements and/or exchanged letters with the despots of Epiros, the Bulgarian tsar, popes Gregory IX and Innocent IV, Frederick II, Genoa, Hungary, Seljuks, Latin emperor Baldwin II, Louis IX of France as well as the Mongols. His image in the sources is that of a stern, stubborn and also a belligerent ruler especially against the French and the Italians bordering his territories immediately across the Aegean.³⁰ Unsurprisingly, given the short span of Theodore II's reign, which was cut short when Michael VIII usurped power in 1259, his chancery produced few documents, as only dealings with the Despotate of Epiros, the Bulgarians, the Seljuks, and the papacy are recorded in the contemporary sources.³¹ Neither John III's, Theodore II's, nor John IV's reigns offer any references in any known source from the period or from the fourteenth century to any commercial negotiations with the French or the Italians that resembles the 1219 agreement with the Venetians. Michael VIII's reign (1259-1282) stands apart from his

²⁹ For a summary of all the references to diplomatic relationships the emperor established, see F. Dölger, P. Wirth, *Regesten der Kaiserurkunden des oströmischen Reiches von 565-1453* (Munich, 1977), 2nd ed., vol. 3, 1-14.

³⁰ *Ibid.*, 8-25.

³¹ *Ibid.*, 25-28.

predecessors' with the exception of Theodore I since he concluded two very important, extensive and definitive agreements shortly after the capture of Constantinople, the first one with Genoa in Nymphaeum in 1261, the other with Venice in 1265. Given the Byzantine practice of naming previous privilege concessions in agreements, I think it is quite significant –even though not definitively conclusive— that neither of these agreements state Nicaean concessions. It is also important in this regard, I believe, to underscore that although Theodore I's agreement of 1219 with Venice is not named in Michael VIII's chrysobull of 1265, this may be partially explained by the vastly different scopes of these two agreements. On the political spectrum Michael VIII's relationship with foreign powers is quite similar to that of the Nicaean emperors; his chancery cast its net largely on the same set of polities as did that of the Nicaeans, except for the treaties struck with the Pisans, the Duchy of Achaia and the Egyptian sultans.³² It is therefore certainly extraordinary and noteworthy that no document of a commercial nature survives from the thirty-six years that John III and Theodore II were in power. By contrast, from the reign of Michael VIII at least a dozen of these documents survive.³³ The absence of trading agreements concluded under the Nicaeans, except for the single document from 1219 issued under Theodore I, is one legitimate reason why the authors who study the Nicaean economy argue that it derived its income essentially

³² *Ibid.*, 30-76.

³³ *Ibid.*, (1865) 30, (1886) 36-37, (1896) 39, (1934), 48-49, (1940-41), 50, (1959) 53-54, (1989) 59-60, (1998) 61, (2017) 65-66, (2019-2020) 66, (2026) 68-69, (2052) 74.

from agriculture rather than trade and sales of industrialized goods and that it was a commercially conservative economy which did not allow foreigners much access to its markets. Yet, the 1245 Florentine document, and the 1261 Genoese documents suggest that foreigners had access to Nicaean markets, even though, for reasons not completely clear to us, foreign presence was not always welcome. In view of the evidence we have discussed concerning the Zeuxippus wares and the possible exportation of Nicaean silks we can argue that a portion of Nicaean income was derived from sales of fine ceramics and perhaps of fine textiles, which had up to now remained unrecognized. Furthermore, the Nicaeans definitely exported raw silk at least during the second half of the thirteenth century. It is also certain that the Nicaean markets imported European and Middle Eastern luxury textiles as we have seen in Part 3. All together the evidence suggests that we need to slightly modify and improve our view on international trade in Nicaea and the international scope of Nicaea's fine ceramic, and potentially its fine textile, industry.

Both Theodore I and John III are represented in the sources as being stubborn leaders, and militarily aggressive toward westerners. It is well known that initially Theodore I was not recognized by the locals in Nicaea, but once he had established his power basis in western Asia Minor, he followed an aggressive policy toward the

Italians.³⁴ For example, the Latin Emperor Henry I states in a letter that he was expecting an attack on his throne from Theodore I in 1212.³⁵ The documents surveyed by Hendrickx also suggest that Theodore did not refrain from taking western captives and consistently assailed the Latin empire. So much so that, as Brezeanu correctly states, the Venetians eventually were forced to recognize him as the *de jure* ruler of the Aegean coast, which initially, that is, shortly after 1204, was allotted to different French lords under Baldwin I, the first Latin emperor of Constantinople.³⁶ It should be mentioned within the same context that Ibn Bibi, the main source on the Seljuks from the thirteenth century (and its fifteenth century Turkish translation) refer to the Nicaean state as “the land of Laskaris” or the “territory of Vastacius” under John III Vatatzes.³⁷ In other words, even though establishing his rule in the region was initially difficult for

³⁴ Akropolites, 12, 15; J. K. Fotheringham, *Marco Sanudo, Conqueror of the Archipelago* (Oxford, 1915), 78: “about which time (1209) Theodore Laskaris was proclaimed emperor of Nicaea, and he claimed to rule over the Cyclades and to expel the duke, whereupon the Naxiotes showed themselves eager to defend their lord, although they were of a different religion.”

³⁵ G. Prinzing, “Der Brief Kaiser Heinrichs von Konstantinopels vom 13. Januar 1212, Überlieferungsgeschichte, Neuedition und Kommentar,” *Byzantion* 43 (1973), 412. Brezeanu disagrees with the argument that the Nicaeans had enough of a navy to be able to attack Constantinople: Brezeanu, “La politique économique,” 41.

³⁶ B. Hendrickx, “Régestes des empereurs latins de Constantinople (1204-1261/1272),” *Byzantina* 14 (1988), 59, 101-102. See *ibid.*, 24-25 for land distribution in Asia Minor under Baldwin. The latter planned to give Nicaea to Louis de Blois, Philadelphia to Stephen du Perche as fiefs. Also see, Brezeanu, “La politique économique,” 43 for Theodore’s recognition as ruler of western Asia Minor.

³⁷ Ibn Bibi’s Persian text is in a 1902 edition made by Th. Houtsma; I used a recently published fifteenth-century Turkish translation: *Yazıcızade Ali, Tevarih-i Âl-i Selçuk* ed. trans. A. Bakır (Istanbul, 2009), 412, 873, 907. For the reference to John III see *The Mission of Friar William of Rubruck* trans. P. Jackson (Indianapolis, 1990 repr. 2009), 65.

Theodore I, both he and his immediate successor were forces to be reckoned with in the eyes of their contemporaries.

Regarding John III there are very few references on peaceful agreements concluded with westerners³⁸—most of the evidence on this ruler point to war or political conflict, or at best, refer to negotiations and embassies. The *Morosini Codex*, for example, mentions that he was a menace to Constantinople even though he remained unable to take the city, something he had attempted to do immediately after ascending to power.³⁹ During the rebellion of the Cretan nobility against the duke of Crete in the 1220s, Sanudo, who was summoned to help quell the rebellion, gave up and rescinded his offer of assistance when he heard that John III was on his way to Crete to help the rebels.⁴⁰ Theodore II extols his father and writes in his panegyric that everyone feared him and preferred peace with him to war, given his martial prowess.⁴¹ In 1234/1235 emperor John of Brienne, poor and unable to pay his own soldiers, turned to the Venetians, Pisans, and Anconitans for help against a joint Nicaean-Bulgarian attack, but

³⁸ Hendrickx, 107.

³⁹ M. P. Ghezzo, J. R. Melville-Jones, A. Rizzi, eds. and trans. *The Morosini Codex* (Padua, 1999) vol. 1 to the Death of Andrea Dandolo (1354), 33-35.

⁴⁰ Fotheringham, *Marco Sanudo*, 101.

⁴¹ L. Tartaglia, *Encomio dell'imperatore Giovanni Duca e Teodoro II Duca Lascari* (Naples, 1990), 150-175.

was fearful that they too would soon abandon him.⁴² Overall, John III was the best known ruler of the Nicaean state; his memory, the wealth of his empire and the memory of his military accomplishments lasted long after his death. Pachymeres, for example, referred to the “immeasurable treasury” which this ruler accumulated.⁴³ His son Theodore II praised John III for having cut off the “many heads” of the state’s enemies and for not holding “anything else above the fatherland.”⁴⁴ Not only is John depicted as a feared rival and a stern patriot, but he also seems to have been quite skilled as a negotiator, as the sources are replete with references to the embassies that came from and went to Nicaea. For example, John III even toyed with the papal legates in 1234 and gave them a very hard time during their visit to Nicaea. The minute details written by the papal legates portray John III as unflinching as the papal officials themselves who refused to give up on “an iota” of the Catholic creed, despite John III’s insistence that the current disagreements, which “have a history of 300 years,” will not be dissolved overnight.⁴⁵ For his staunch attitude toward his enemies, military prowess, and for the economic prosperity under his rule he became a legendary figure, commemorated, not only contemporaneously by Theodore II and George of Pelagonia,

⁴² Hendrickx, 117, 120; H. Golubovich, “Disputato Latinorum et Graecorum seu relation Apocrisariorum Gregorii IX de gestis Nicaea in Bithynia et Nymphaeae in Lydia (1234),” *Archivium Franciscanum Historium* 12 (1919), 446.

⁴³ Pachymeres, *Relations historiques*, vol. 1, 97.

⁴⁴ Tartaglia, *Encomio*, lines 76-80, 503.

⁴⁵ Golubovich, “Disputato Latinorum et Graecorum,” 453.

but also as late as the eighteenth century by the Athonite monk Nikodemos in a metabyzantine *Life*.⁴⁶

At this point in the discussion it is useful to make a detailed analysis of the trade agreement issued under Theodore I and compare the stipulations of that agreement with those concluded with Genoa and Venice under Michael VIII. As mentioned above, the 1219 agreement is the only surviving document containing direct information on trade between the Nicaean state and the Venetians, even though Brezeanu argues that it repeats the stipulations of an original agreement signed five years earlier, in 1214, and thus is the sequel of that agreement extending it for another five years.⁴⁷ It is a peace agreement, written in the first person of Theodore I, who allows the Venetians the right of “entering, staying, and leaving all the lands of my empire” and going to all other locations via land or the sea; their ships, men and goods carried on their ships will be free from harm and molestation.⁴⁸ Furthermore, in all their dealings on Nicaean soil with respect to all of their goods, the Venetians will be free from the ordinarily ten percent commercial tax (*kommerkion*) and be left “untouched” by any other types of

⁴⁶ J. Langdon, *Byzantium's Last Imperial Offensive in Asia Minor* (New Rochelle, 1992), 25-26. Analyses of the evidence of George of Pelagonia and Akropolites and other sources for the offences of John III in Asia Minor against the Turks are on pp. 28-33.

⁴⁷ Brezeanu, “La politique économique des Lascarides,” 42.

⁴⁸ “ut omnes Veneti euntes, stantes and reddeuntes in omnibus terris mei imperii, et in omnibus diversis aliis locis per terram et per mare, cum navibus ipsorum et cum hominibus et rebus omnibus infra astantibus eisdem navibus, ab Imperio meo et hominibus ejusdem sine dampno...conservabuntur.” *TTh* II, 206.

requisitions (which are not listed); they can engage in the trade of whatever merchandise they wish without any impediments in the state of Nicaea.⁴⁹ In return, the Nicaean merchants have the right to engage in trade, to enter, stay and exit Constantinople and elsewhere within the Latin dominions as long as they pay the *kommerkion*.⁵⁰

There are some further interesting and noteworthy differences between the 1219 agreement with the Venetians and the 1261 agreement concluded between Michael VIII and the Genoese. In the latter agreement, the Genoese are explicitly immune from all fees, exactions, and the *kommerkion* within “my imperium;” from entering, staying and exiting by land or sea, with or without merchandise, to sell or to buy and to transport the merchandise elsewhere.⁵¹ Furthermore, the agreement allocates the Genoese *loggia* and a *palatium*, churches, baths, bakery, gardens and sufficient number of houses as residences for the merchants in or near such commercially key locations such as Anaia, Smyrna, Atramyttion, Constantinople, parts of Thessalonike, Cassandra, Mitylene,

⁴⁹ “isti Veneti cum omnibus rebus ipsorum in omni subiectione terrarium mei Imperij per terram et per mare debent esse liberi et sine commercio et sine aliqua alia dactione, et debent facere, qualescumque merces eis placent, per totum Imperium meum et sine aliqua inquisitione.” *Ibid.*

⁵⁰ “Mercatores quidem terrarium Imperij mei in Constantinopoli et in alijs terris tue dominationis, euntes, stantes, redeuntes debent facere merces ipsorum sine impedimento, salvo iure commercii, quod dare debent.” *Ibid.*

⁵¹ “...omnes Januenses ...sint franchi et liberi et immunes in toto praedicto Imperio meo ab omni commercio, dacita, exactione, intrando Imperium meum et exeundo, stando et eundo de terra in terra, cum mercibus et sine mercibus illuc delatis vel illic emptis,...” *Jus Graecoromanum*, eds. Io. Zepos and P. Zepos, (repr. Aalen, 1962), vol. 3, 489.

Chios, Crete, and Negroponte.⁵² This agreement makes clear that, first, the Genoese are free from paying taxes not only on merchandise in transit to be sold elsewhere but also on goods sold in the Byzantine state. The exemptions are not limited to the *kommerkion* and the text differentiates between *kommerkion* and the other taxes and explicitly defines what the exemptions include. In addition, the Genoese are going to be given quarters, with all the necessary building structures for the sustenance of merchants, which would allow them to stay in important trading centers in western Asia Minor, Constantinople, Macedonia and the islands. In these stipulations there are significant differences in terms of the extent of trade and the imposed taxes on the part of the Nicaeans and their successor to the Venetians, on the one hand, and to the Genoese on the other. In the 1261 agreement Michael VIII agrees to annually pay to the commune of Genoa and the Genoese archbishop a total of 560 *hyperpyra*, and make a gift of gilded *pallia* in memory of the precedent established under Emperor Manuel I “of blessed memory.”⁵³ The latter agreement contains other concessions made on the part of the Byzantines to the Genoese, such as the stipulation, which allows all legal cases involving the Genoese to be handled by a Genoese judge. Also significant is the paragraph which agrees to the

⁵² “Item dedit et concessit in terris infrascriptis et qualibet earum ad liberum proprietatis jus et domini, in Anea, Simirris, in Landimuti, et Dei misericordia in Constantinopoli, et in partibus Saronichi, apud Corsandrum, et infrascriptis insulis et qualibet earum, scilicet in Metelli, in Sio et Dei misericordia in Creti, in Negroponte, logiam, palatium, ecclesiam, balneum, furnum et jardinum, et domos sufficientes ad stallos mercatorum, qui ibidem venerint causa negotiandi.” *Jus Graecoromanum* vol. 3, 489.

⁵³ *Jus Graecoromanum* vol. 3, 490.

allocation of well supplied quarters to the Genoese in important port cities of the empire. The 1219 agreement with the Venetians does not contain any such stipulations. However, at least the 1245 Florentine document and the 1261 Genoese documents inform us that the Genoese, Pisans, Lucchese, and Florentines were trading in Atramyttion. In the 1219 agreement the Venetians were allowed to enter the Nicaean ports, to stay to conduct business in Nicaea and leave without having the advantage of establishing their own posts as they were wont to do in accordance with the previous agreements signed with the Venetian commune and Alexios I (1082), Alexios III (1198), and in 1265, Michael VIII.⁵⁴ Even though there is no direct evidence about Venetian commercial activities in Nicaea, its details it seems quite likely that they were indeed engaged in trade with the Nicaeans.

Unlike the 1265 agreement, however, the 1219 agreement does not refer to any trading posts within the state of Nicaea that the Venetians could permanently use. It is indicative in this regard that the 1265 agreement with the Venetians, like the 1261 agreement with the Genoese, contains a list of trading quarters (*emporia*) given to the commune in Almyra, Thessalonike, Constantinople, Atramyttion, Voleron, Ainos, Anaia and Smyrna.⁵⁵ Not a single port town/quarter is referred to in the 1219 agreement. One could argue, however, that these same *emporia* mentioned in the 1261

⁵⁴ See Chapter 11, n. 51-53 above.

⁵⁵ *Jus Graecoromanum*, vol. 3, 496-497; *TTh* III, 69-71.

and 1265 agreements were used by the Genoese and the Venetians before the 1250s because the latter expressed interest in establishing their own quarters there in the latter half of the thirteenth century, even if their presence was not officially recognized. In other words, even though we cannot conclusively say how active the Italian traders were in these ports in the first half of the thirteenth century (at least one of them, Anaia, —possibly Palation also— is mentioned for the first time in but consistently thereafter throughout the thirteenth century), they were clearly known by both Italian cities. As such the ports were deemed important enough for the Italians to request a quarter shortly after Michael VIII came to power and took Constantinople.⁵⁶ That said, it is nevertheless not certain whether or not the Genoese or the Venetians had permanent quarters in these port cities until after the conquest of Constantinople. I am more inclined to think in line with the above discussion that, although the foreign

⁵⁶ Anaia is certainly an interesting case, because it is well-attested both in the written sources and in the archaeological evidence. There is a good deal of written on its importance, both Greek and Latin. It is especially an interesting site because of the ample evidence there on thirteenth century fine ware ceramics. For written evidence note especially the reference in Theodore I's 1214 exemptions to the monastery of Patmos: "ὅθ(εν) καὶ διορίζεται πάσης καὶ παντοίας ἐξκουσσεΐ(ας) (ἐ)παπολαύ(ειν) αὐτά, ὅσάκις ἂν ἔρχωντ(αι) καὶ ἐλλιμενίζωσι τοῖς ἐν τῇ Ἀνατολῇ παραλί(οις) μέρεσιν, εἴτε ἐν αὐτῷ τῷ ἐμπορίῳ τ(ῆς) Ἀνέας καὶ τῶν υγέλ(ων), εἴτε τ(οῖς) Λινοπεράμα(σι) καὶ τῇ Σμύρνη, εἴτε καὶ ἐν τ(οῖς) Παλατί(οις) καὶ τῷ Ἰερῷ καὶ αὐτῷ τῷ Μελανουδ(ίῳ) καὶ τ(αῖς) λοιπ(αῖς) παραιγ(ιαλίαις) [χ]ώραις τ(ῆς) βα(σι)λ(είας) μου, κὰν ὅποῖ(ον) ἄρα καὶ ἐπιφέρωντ(αι) φόρτον καὶ ἡντιναοῦν πραγματεΐ(αν) μεταχειρίζωντ(αι)." Vranouse, *Βυζαντινὰ ἔγγραφα τῆς μονῆς Πάτμου* vol. 1, 226. Also see the "Judicium Venetorum" from the second quarter of the thirteenth century for references to some Venetian citizens—that is, merchants—robbed of their goods in Anaia. Note especially the case of Constantine Calafatus (a *gasmoulos*?; half-Greek Venetian?) who was robbed by John del Cavo, inhabitant of Anaia, of his "grey *pannum*" and wool cloth from the shores of England ("stanfort") and requested 17 *hyperpyra* as a compensation for his loss: "Item dixere dicti iudices, Constantino Calafato, derobato per Johanem de Cavo, habitorem Anie, de suis pannis de griso et de stanforte, juranto, sic esse, restitui debere pro satisfactione sui dampni yperpera 17." *TTh* III, 184. For the remaining references to Anaia see, *ibid.*, 71, 161, 179-180.

traders had access to the Nicaean ports previously, their access was at least not fully and officially recognized until after Michael VIII came to power.

It is evident that the Venetians and the French, especially the former, had a substantial commercial advantage in the eastern Mediterranean especially after 1204, which can be evinced from the commercial agreements they made with polities in the eastern Mediterranean and in the Aegean basin. The pact of 1219, compared to the agreements Venice concluded with other neighboring polities in the thirteenth century and with the Byzantines later in the same century, is rather narrow and limited. Based on what we have discussed, it is impossible to know the size of Venetian trade with Nicaea, but it is, in my view, possible to argue that it certainly was limited by Nicaean commercial policies.

We do not have many explicit references to Venetian traders within Nicaea specifically, yet we occasionally hear that a group of about eight hundred Italians were employed in the Nicaean army as mercenaries.⁵⁷ We first learn about the Italians of the Nicaean army during the offensive against the Turks in 1211.⁵⁸ They are also mentioned in letters of Innocent III and, of the Latin emperor of Constantinople Henry I, who seems not to have been able to pay his soldiers as much as Theodore could — a possible

⁵⁷ Akropolites gives the number as 800 in parag 9. The entire army consisted of 2,000 men. Akropolites, 15-16.

⁵⁸ *Ibid.*

explanation for their high number in the Nicaean army.⁵⁹ During the Cretan rebellion of the 1220s, the duke of the island Giovanni Storlato turned to Marco Sanudo for assistance, but he was left alone once the latter was informed that John III of Nicaea was approaching the island with thirty-three galleys led by his admiral Aussentio to assist the Cretan rebels.⁶⁰ From another reference in Pachymeres, it is clear that the Italians were not alone; there also were Persian (i.e. Turkish) mercenaries employed in Michael VIII's army.⁶¹ According to Simon de Saint- Quentin, Seljuk armies too employed Latin mercenaries during the so-called Babai revolts, which took place shortly before the Mongol victory against the Seljuks in 1243.⁶²

All of this evidence shows that there certainly were Latins and Turks employed in the Nicaean army. We do not know, however, if the high number of Latin mercenaries has any parallels with or any relevance for the presence of Latin merchants in Nicaea. We have seen above that the first half of the thirteenth century is rather poor on direct evidence on Italian and French merchants' commercial engagements with Nicaea. The stipulations of the 1219 agreement explicitly state that the Venetians were allowed to sell their merchandise in the Nicaean state tax-free, and as far as we know,

⁵⁹ R. Macrides, trans., *George Akropolites. The History* (Oxford, 2007), 130, n. 9.

⁶⁰ Fotheringham states that Calergi is the only source that discloses the name of the admiral. Sanudo, Fotheringham, *Marco Sanudo*, 101, with notes.

⁶¹ Pachymeres, *Relations historiques*, 273; echoed in Ibn-Bibi: *Yazıcızade Ali, Tevarih-i Al-i Selçuk* ed. trans. A. Bakır (Istanbul, 2009), 244.

⁶² J. Richard, ed., *Simon de Saint-Quentin. Histoire des Tatares* (Paris, 1965), 52, 57.

the Venetians are the only known polity whose merchants had sales-tax-free status. If this assumption is correct, then the Pisan, Genoese, Florentine, Lucchese, Frankish, Turkish and other merchants must have had to pay not only the *kommerkion* but also all the additional smaller commercial taxes such as the *diabatikon* (transit tax) and the *skaliatikon* (embarkment tax). This in turn would suggest the probability that the Nicaean state had derived a considerable revenue from commercial taxes. In other words, if my conclusions in Part 2 and Part 3 are correct, that is, if the Nicaeans were exporting fine wares and possibly also fine textiles, alongside agricultural products, their income from trade must have been significantly higher than previously thought. With that in mind, I will now focus on an aspect of textile production that will bring us once again to the question of Nicaean economic protectionism.

Another Aspect of Nicaean Economic Protectionism? Alum and Textile Production in Nicaea

As we have seen in Part 3 and earlier in this chapter, we are well aware of the presence of the Italian and French, alongside Middle Eastern textiles in Nicaea. There is therefore collective, even though indirect, evidence showing that the Nicaean state was connected to the veins of interregional, international trade. One needs only to be reminded here again of the statements in Gregoras and Skoutariotes, in particular, about how well supplied and internationally connected the Nicaean markets were. The possible limitations imposed on foreign merchants' trading capacities by the Nicaean

rulers, however, needs to be explored further. The evidence discussed below on Nicaea's possible use of its alum resources should best be viewed in relation to what we have learned in Part 3 on fine textile imports into Nicaea, as well as the restrictions that at the very least John III prescribed for the Nicaean citizens who were able and willing to buy western clothes.

An important, even though indirect, source on Nicaea's use of its mineral resources is Simon de Saint-Quentin. We do not know much about his identity except that he was a Dominican missionary of the papacy traveling with Ascelin of Lombardia on an unsuccessful mission to the Mongols. On that mission in 1243 he passed through eastern Turkey on the eve of the Mongol invasion of their tributary, the defiant Seljuk state. He traveled through, or was informed by other sources about, most if not all of the important cities of Seljuk Asia Minor, including Melitene, Sebasteia (mod. Sivas), Iconion, Neocaesarea (mod. Niksar), Theodosiupolis (mod. Erzurum), as he consistently remarks on their opulence and wealth.⁶³

Simon's references provide indirect evidence on Nicaea because his direct references are to Seljuk Asia Minor, not Nicaean. He singles out the silver, iron, salt and alum mines as important sources of wealth for the sultan, alongside the wool textiles

⁶³ *Simon de Saint-Quentin*, 67-68.

called “capelli de bonet” which was sold in France and England.⁶⁴ Apart from the mineral and metal resources of the Seljuk state, it is clear that there was an important trade both in textiles and textile dyes/mordants, as the missionary’s reference to alum and coccus (*granum*) near the settlement he calls Hisar indicate.⁶⁵ Simon also refers to samite garments that the Turks sent to the Mongols as tribute.⁶⁶ Especially important for our purposes is Simon’s references to the *Latini* and *Franci* as mercenaries in the Turkish army as well as his interest in the products of the east.⁶⁷ Simon provides, in other words, some indirect evidence that western merchants were probably active in the land of the Nicaean state’s closest neighbors, the Seljuks.⁶⁸

⁶⁴ These “capelli de bonet” are made of goat hair rather than sheep wool: “Ibi eciam preter lanas ovium habent lanam caprinam optimam de qua fiunt capelli de bonet qui mittuntur venales in Franciam et Angliam.” *Ibid.*, 69. It is either referring to the fabric of a head gear or perhaps to a hooded cope. See, “capellus” in DuCange and Blaise médiéval in Brepolis on-line *Database of Latin Dictionaries*. M. Lushchenko, “L’image de l’Asie Mineure et des Turcs dans les textes narratifs du Moyen Âge Français (XIIe-milieu du Xve siècle),” unpublished Ph.D. dissertation, University of British Columbia (April, 2011), 65, translates the quoted sentence from Simon as: “Là, en plus de la laine de brebis, ils ont aussi de la laine de chèvre excellente dont on fait du tissu de bonnet qui se vend en France et en Angleterre.” (https://circle.ubc.ca/bitstream/handle/2429/33766/ubc_2011_spring_lushchenko_marina.pdf?sequence=1. Accessed 10.26.2012).

⁶⁵ Silver mines were worth 3,000 *soldanos*, out of which he estimated that the sultan was making 400,000 *hyperpyra* annually. He refers to three iron mines and to them he add two alum mines one near Sivas the other near Hisar (near Iconion). In addition, he refers to seven salt mines. He also refers to the Armenians and John III sending the sultan silver and gold. *Ibid.*, 68-69.

⁶⁶ “Denique in anno quo contritus fuit soldanus a Tartaris, ante pugnam dedit xvi milia paria vestimentorum de samito et de thabith, sarbois exceptis.” *Ibid.*, 70.

⁶⁷ For his reference to the Franks and Latins in the Seljuk army see above Chapter 11 n. 62, as well as *ibid.*, 64-65, 72-74, 76.

⁶⁸ For Simon’s interest in the minerals and the products of the Seljuk state see, *ibid.*, 68-70.

Even though Simon mentions almost nothing explicit regarding the Nicaeans—apart, that is, from his references to the silver and gold that John III and the Armenians were paying to the Seljuk sultan—it is, I believe, clear from the scope of his narrative regarding the wealth of the Seljuk state that the trade in minerals, metals and mordants as well as textiles was conspicuous and important. It is noteworthy that he singles out the *Franci* and the *Latini* in Seljuk Asia Minor and in Syria both in their role as mercenaries and possibly also as merchants.⁶⁹ Most significant is Simon's reference to alum and the western interest that his interest attests in Seljuk alum mines. How about western (alum) trade with Nicaea? For that we will analyze what Simon does not say based on what he explicitly mentions.

Claude Cahen writes that all the references to alum before the thirteenth century concern Egypt, and he concludes, convincingly, that as the main source of this mordant, Egypt had a monopoly over it before the thirteenth century.⁷⁰ Anatolian—but not

⁶⁹ See *ibid.*, 97-98 for Simon's reference to a merchants transporting Franks to Syria.

⁷⁰ C. Cahen, "L'alun avant Phocée. Un chapitre d'histoire économique islamo-chrétienne au temps de Croisades," in *Idem., Turcobyzantina et Oriens Christianus* (London, 1974), I, 443. Jacoby, in a more recent article, argues that the Phocaeen alum was not produced in significant amounts before the thirteenth century and that Phocaeen alum mines fell under Genoese control in 1264: Jacoby, "Production et commerce de l'alun oriental en Méditerranée, XIe-XVe siècles," in eds. P. Bogard, J. P. Brun and M. Picon, *L'alun de Méditerranée* (Aix-en-Provence, 2005), 233-236. Picon and Çolak et. al., on the other hand, argue for the possibility for Phocaeen mines being active in Antiquity at the very least based on the alum exported alongside Phocaeen wares: See, M. Çolak, V. Thirion-Merle, F. Blondé, M. Picon, 'Les régions productrices d'alun en Turquie aux époques antique médiévale et moderne: gisements, produits et transports,' in eds. P. Bogard, J. P. Brun and M. Picon, *L'alun de Méditerranée*, 65; M. Picon, "La préparation de l'alun à partir de l'alunite aux époques antique et médiéval," in *Arts du feu et productions artisanales: XXe Rencontres internationales d'archéologie et d'histoire d'Antibes: actes des rencontres, 21-22-23 Octobre 1999*, ed. P. Pétrequin, et. al., (Antibes, 2000), 519-530. Pisans and the Genoese were involved in

Phocaeen—alum is first mentioned in an agreement between Cyprus and Provence in 1236 and Simon’s remarks from 1246 constitute the second mention in western sources before William of Rubruck’s reference to it in 1255.⁷¹ William, on the other hand, leaves absolutely no doubt who the traders interested in the alum mines of Seljuk settlement at Hisar were: “In Iconium I came across several Franks and a Genoese trader from Acre, Nicholas de Santo Siro, who with his partner, a Venetian called Boniface Molendino, exports all the alum from Turkia, with the result that the sultan may not sell it to anyone else and they demand a high price.”⁷² The Byzantines, under Michael VIII, gave the right to own and operate the alum mines in Phocaea to the Genoese brothers Benedetto and Manuele Zaccaria, who made huge profits out of their monopoly on Phocaeen alum from 1275 to 1455.⁷³ Even though Cardon claims that the date at which alum began to be manufactured in Phocaea is unfortunately not known because the mine, at the time of his writing, was in an inaccessible military zone, it is certainly not

the exportation of Egyptian alum in Alexandria since at least the early twelfth century. Pisans had quarters in Alexandria and Acre. They were also armed with commercial privileges from the 1150s on. See, Jacoby, “The Pisan Commercial Manual of 1278,” 463. For Pisan trade in Middle Eastern ports in the thirteenth century, see C. Otten-Froux, “Les Pisans en Égypte et à Acre dans le seconde moitié du XIII^e siècle: documents nouveaux,” *Bollettino Storico Pisano* 52 (1983), 165-168, 174 (for the document from the 1250s).

⁷¹ *Simon de Saint-Quentin*, 97-98.

⁷² “Yconii inveni plures Francos et quemdam mercatorem Ianuensem de Acon, Nicholaum nomine de Sancto Siro, qui cum quodam socio suo veneto, nomine Bonefacio de Molendino, asportaverunt totum aluinum de Turkia, ita quod Soldanus nemini potest aliquid vendere nisi ipsis duobus.” See *Sinica Franciscana*, A. van den Wyngaert, ed. (Florence, 1929), vol. 1, 328; *The Mission of Friar William of Rubruck* trans. P. Jackson (Indianapolis, 1990, repr. 2009), 273.

⁷³ A. E. Laiou, “Alum,” in *ODB*; E. Byrne, *Genoese Shipping in the Twelfth and Thirteenth Centuries* (Cambridge, Mass., 1930), 65; Zachariadou, *Trade and Crusade*, 167-168.

unreasonable to surmise that the mine was operating already under the Nicaeans.⁷⁴

According to Cardon, up until the discovery of the Spanish mines near Mazarrón near Cartagena in 1462, none of the known alum mines in the thirteenth century had a capacity that could rival the Phocaeen mine, perhaps except, if it was active in the thirteenth century, Koloneia (modern Aksaray), which was under Seljuk control.⁷⁵ Even though we will not know the date of opening of the Phocaeen mine until archaeologists enter the site, we can surmise that if indeed it was operating under the Nicaeans it is clear that the mine was not managed by the Genoese or the Venetians who clearly had an interest in alum to meet the demand for mordant for their growing textile industries and traveled further east to Koloneia or Kotyaion to get their alum from the Seljuks instead of the Nicaeans. Coupled with Gregoras and Pachymeres' observations on John III's protective measures regarding the local textile industry, it is possible that Nicaean rulers placed some restrictions on alum sales to westerners. The mines were likely active under the Nicaeans as Michael VIII delegated their control over to the Genoese. We should remember that the silk in the possession of two Lucchese merchants had been confiscated from them near Atramyttion before 1261. All the known and surviving documents from the reign of the Palaiologoi are official complaints made by westerners for theft of their goods, not for state confiscation which is clearly the case in the 1261

⁷⁴ D. Cardon, *Natural Dyes. Sources, Tradition, Technology and Science* (London, 2007), 24.

⁷⁵ Laiou, "Alum" in on-line *ODB* (Accessed 10. 11. 2012).

Genoese documents that concern Lucchese merchants. Until further evidence to the contrary is found, we might assume that the Nicaean rulers indeed tried to prevent raw silk and alum exports from their state.⁷⁶ If this is true, then in addition to the restriction on Italian maiolica imports we discussed in Part 2, it is another evidence showing Nicaean economic protectionism at work, and pointing out that the Nicaeans aimed to protect their local textile industry.

William Rubruck traveled as the Franciscan envoy of Louis IX of France to the Mongol court in Karakorum (in modern Mongolia), and in 1253 about ten years after Simon he too passed through eastern Asia Minor on his way back to France when his mission was over. His account begins *in medias res* with the Seljuk port of Sinope on the northern shore of the Black Sea where a lively trade –especially in dried fish– between the southern and northern shores of the Black Sea is conducted.⁷⁷ William traveled directly from Sinope to Cherson and began his journey on land to Karakorum. We learn later that he arrived at Sinope via Constantinople. The “merchants of Constantinople,” as he refers to them, were clearly wont to travel the same route he traveled to the Black Sea coast, as they suggested to him that he take fruit muscadine wine and a rich type of

⁷⁶ Jacoby, “Rural Exploitation in Western Asia Minor,” 11-12, argues based on evidence on raw silk exports from Nicaea.

⁷⁷ *Sinica Franciscana*, ed. A. van den Wyngaert, 164-166; P. Jackson, *William of Rubruck*, 61-62, 64.

biscuit which he later found to be useful advice.⁷⁸ Apart from the two references to John III and his embassy that William encountered at the court of Mangu Khan, there are no references to Greeks or Greek merchants from the state of Nicaea in Rubruck's account even though he refers to merchants from Constantinople, Venetians, the Genoese and the Franks.⁷⁹ Rubruck's references are in this regard complementary to the observations of Simon de Saint-Quentin. The westerners, especially the Italian merchants, were quite active around the borders of the state of Nicaea.

Even though William of Rubruck does not refer to Greek merchants, his representation of Vatatzes is worthy of note. When he met John III's ambassador at the court of Mangu Khan, the Greek ambassador asked William whether Louis IX and Vatatzes were on good terms or not, to which William responded, "neither that." John III's ambassador corrected William by responding to him that they were "at peace."⁸⁰ John III was clearly trying his best to avoid conflict with the Mongol Khan, as he imprisoned and confiscated the goods of a cleric from Acre by the pseudo-name Theodulos, and possibly returned him to the Mongols because he failed to produce

⁷⁸ "...et mercatores Constantinopolis consuluerunt mihi quod acciperem bigas, immo quod emerem proprias bigas coopertas, in quibus portant Ruteni pelles suas, et in illis includerem res nostras quas nollem cotidie deponere...": *Sinica Franciscana*, ed. A. van den Wyngaert, 169; P. Jackson, *William of Rubruck*, 68.

⁷⁹ References to John III: *Sinica Franciscana*, ed. A. van den Wyngaert, 167, 247, 255, 287, 290, 325.

⁸⁰ *Sinica Franciscana*, ed. A. van den Wyngaert, 247: "Tunc quesiverunt si vos haberetis pacem vel bellum cum Vastacio. "Nec pacem", dixi, "nec bellum"; et ipsi quesiverunt quomodo hoc posset esse. "Quia", dixi, "sunt terre eorum remote ab invicem nec habent aliquid facere ad invicem." Tunc dixit nuncius Vastacii quod pacem, reddens me cautum. Tunc tacui."

official letters that designated him as the Pope (Gregory IX)'s envoy.⁸¹ It is significant, however, that Theodulos, on his way to Rome, entered the State of Nicaea possibly to sail thence for the Holy See. We can only speculate on whose ships Theodulos would sail for Rome but it would likely have been on an Italian ship. The fact that William of Rubruck presents Nicaean lands as a regular route (possibly because it was shorter) for westerners returning on land from the Mongol Court on land via Seljuk Asia Minor to Rome is quite interesting. This incident also shows, that even though it was a regular route, John III's court was strictly controlling the foreign traffic. That said, this particular case might have been exceptional; because, the fact that Theodulos was coming from the Mongol Khan his arrival might have heightened the security concerns at John III's court.

In the last decades of the thirteenth century and early fourteenth century too, without a single exception, all the references in the sources in eastern Asia Minor and the middle and the near east are to Italian (Latin) and French ("Frank") merchants. References to Greek merchants are few even though Michael VIII and his successors concluded agreements with Muslim rulers that have stipulations governing trade which

⁸¹ *Sinica Franciscana*, ed. A. van den Wyngaert, 255: "Sic ergo venit Theodolus usque ad Vastacium, volens transire ad Papam, et decipere Papam sicut deciperat Manguchan. Tunc Vastacius quesivit ab eo si haberet litteras Pape quod esset nuncius et quod deberet ducere nuncios Tartarorum. Ipsum autem non valentem ostendere litteras cepit et spoliavit omnibus que acquisiverat et posuit in carcerem. Ipse vero Moal incurrit infirmitatem et mortuus est ibi." Also see, *ibid.*, 287, 290, 325 (on Mangu's plans to attack the State of Nicaea).

mention Byzantine traders. Among these agreements we could cite the 1281 agreement with Mamluk Sultan Qalaun has been published and analyzed.⁸² Despite the absence of Byzantine/Greek merchants the Turkish sources too confirm the presence of abundance in Nicaea which Theodore Skoutariotes wrote regarding Nicaean city of Magnesia where goods were brought in from eastern lands, be it “Egypt or India or elsewhere.”⁸³ It is quite likely that some, if not a greater proportion, of these goods were brought by Italian or Frankish merchants given from the abundant references to Italian and Frankish merchants in the sources.

The early fourteenth century Turkish translation of the thirteenth century *Life* of the Persian poet Rumi contains many references to Persian and western merchants in Seljuk lands. The merchants in this text are either Persian, “Frank” or Seljuk; we read about Persian merchants in Iconion and “Franks” in Attaleia.⁸⁴ A merchant from Tabriz arrives at the residence of Rumi in Iconion, and to his surprise the holy man knows about a past incident between the merchant and a Frankish monk, and admonishes the merchant requiring him to go back to the land of the Franks to find the monk to

⁸² M. Canard, “Le traité de 1281 entre Michel Paléologue et le Sultan Qalāun,” *Byzantion* 10 (1935), 669-680. The agreement contains many references to Byzantine and Egyptian merchants being free to engage in trade within the domains of the other polity.

⁸³ See Part 3, n. 330 above.

⁸⁴ Ahmet Eflaki, *Ariflerin Menkıbeleri*, trans. T. Yazıcı (Istanbul, 1973), vol. 1, 169, 193.

apologize to him.⁸⁵ In another instance, Rumi sends the Seljuk sultan on a quest to find Shems, a holy figure, whom the sultan eventually locates in Damascus playing a board game with a Frankish boy.⁸⁶ Seljuk merchants travel to Constantinople and the monks in Constantinople know and respect Rumi.⁸⁷ Because the Turkish sources do not distinguish between the French and the Italians but commonly refer to them both as Franks it is not always possible to distinguish between them. Nevertheless, it is remarkable that all the international commercial connections between Iconion are without an exception with the “Franks,” whether in fact the word refers to the Italians or the French. The references in the thirteenth century narrative of Ibn Bibi and its fifteenth century Turkish translation are also consistent in this regard. The references to Nicaean rulers concern only diplomatic relations. Theodore I, referred to as the *Leshker* of Philadelphia in Ibn Bibi’s history, is mentioned in the context of a tribute he sent to Giyaseddin Keykubad.⁸⁸ On another occasion we learn that the exiled Seljuk sultan Izzaddin Kaykaus boards a ship from Attaleia and arrives at Constantinople to seek help from Michael VIII.⁸⁹ The only reference in Ibn Bibi to commerce in Iconion alludes to a constant flow of merchants from Constantinople, the land of the “Franks,” Cyprus,

⁸⁵ *Ibid.*, 170-171. It should be mentioned here that the term “Frenk” never refers to Greeks in Turkish texts.

⁸⁶ *Ibid.*, vol. 2, 133-134.

⁸⁷ *Ibid.*, vol. 1, 196-197.

⁸⁸ *Yazıcızade Ali, Tevarih-i Al-i Selçuk* ed. trans. A. Bakır (Istanbul, 2009), 202.

⁸⁹ *Ibid.*, 771.

Rhodes and Tarsus in Cilicia.⁹⁰ I am aware of no references in the Greek sources to Greek merchants traveling out of Nicaea, or after 1261, from Constantinople, to Seljuk Asia Minor. We know from Gregoras, on the contrary, that during the famine in ca. 1244 the Seljuk merchants streamed into the Nicaean state to buy grain.⁹¹

The “Frankish” domination of the international markets in the Black Sea and the Middle East is attested by the sources of the late thirteenth century.⁹² For example, Marco Polo writes that although his uncle and father were the first Latins the Tartar chief Alau met in Bukhara;⁹³ in lesser Armenia and Cilicia (specifically in Ayas near

⁹⁰ *Ibid.*, 783.

⁹¹ Gregoras, 42. See above Part 3, n. 331.

⁹² The account roughly covers the period between 1268 and 1295 when Marco Polo returned from Asia. See, Jacoby, “Marco Polo, His Close Relatives, and His Travel Account: Some New Insights,” *Mediterranean Historical Review* 21. 2 (2006), 193–218.

⁹³ Prášek’s edition is based on an early fourteenth-century Latin translation of the version made by Francesco Pipino, a Dominican monk from Bologna: J. V. Prášek, *De consuetudinibus et conditionibus orientalium regionum (translatio latina operis noti sub titulo ‘Il Milione’)*, (Prague, 1902), 7 (Hereafter, *Il Milione*): “Eo tempore Vir quidam tocus prudencie a preminato Alau Rege ad maximum tartarorum regem directus applicuit Bochara. Ibi que prefatos reperiens uiros, qui iam plene fuerant in lingua tartarica eruditi, supra modum letatus est quod viros latinos nunquam alios viderat, quos tamen videre plurimum affectabat.” *The Book of Marco Polo*, ed. and trans. H. Yule and H. Cordier (New York, 1903), 3rd ed., vol. 1, 10. Yule and Cordier’s version is based on the “subsequent” Italo-French versions, arguably, of the “original” edited by M. Pauthier (MS. Paris, B.N., Fr. 5631) and the so-called Geographic Text (published by the Société géographique de Paris in 1824, based on the MS. Paris, B.N., Fr. 1116). The Italo-French manuscript (Fr. 1116) was subject to the critical edition of Luigi Foscolo Benedetto, *Marco Polo. Il Milione* (Florence, 1928). The latest critical edition of all the surviving Italo-French manuscripts (of which there are eighteen) is: P. Ménard, et. al., ed., *Marco Polo. Le devisement du monde* (Geneva, 2001), vol. 1, 120. According to Ménard, the “original” text of Marco Polo is a red herring; all of the surviving versions have additions and subtractions. *Ibid.*, 12–13. In addition to the Latin and Italo-French versions there are also two separate versions in Tuscan and Venetian dialects. The critical edition of the Tuscan, Italo-French (of Fr. 1116 or manuscript F) and the Latin manuscript Z (manuscript in Toledo) is in ed. G. Ronchi, *Milione. Le divisament dou monde* (Milan, 1982).

Alexandretta , modern Iskenderun) he refers to “the merchants of Venice and Genoa and other countries.”⁹⁴ Regarding Georgia, specifically the area around the Caspian Sea, he writes that the Venetians or the Genoese do good business there,⁹⁵ and adds that the merchandize in Tabriz, “attracts many merchants from everywhere, from India, Baudas [Bagdad], Cremessor [Gulf of Hormoz], as well as Latin merchants, and merchants from infinite number of regions, are enriched there.”⁹⁶ Ibn Battuta who traveled in Asia Minor in the 1330s arrives at “the land of the Rum” on a Genoese ship. He writes about the “Christian merchants in Attaleia,”⁹⁷ and the Genoese in Tana.⁹⁸ Yet again, I think the absence of evidence on the Greek merchants and the domination of the Italian and French/Frankish merchants is evident. It seems that the Nicaean state was situated in the midst of a tightly-knit communications system established by western merchants. If there was a constant flow of merchandise and goods into and out

⁹⁴ “Ibi est supra mare ciuitas, que dicitur Glaza, [Ayas] maris portum habens, ad quem multi conueniunt mercatores de veneciis, de Janua et aliis regionibus plurimis.” *Il Milione*, 16; *The Book of Marco Polo*, 41. Ménard, *Le devisement du monde*, 124. The French version does not have mention the merchants.

⁹⁵ Prášek’s edition, *Il Milione*, refers to the Venetians: “homines patrie mercatores sunt et operarii optimi.” This section in Yule’s edition (Book 1, ch. 4) reads, “of late the merchants of Genoa have begun to navigate this sea [the Caspian Sea]”: *The Book of Marco Polo*, 52. The French version also has Genoese: “Et ore nouvement les marcheans de Gennes nagent par celle mer...” Ménard, *Le devisement du monde*, 140.

⁹⁶ *Il Milione*, 21 : “Ciuitas in situ optimo est, propter quod illuc confluunt mercatores Vndique, s. de India, de baldacho, de mosul et de cremosor, de terris eciam latinorum et de aliis regionibus infinitis, ibi multi mercatores ditantur.” *The Book of Marco Polo*, 75 translates “Latins, especially the Genoese,” which is given in Ménard, *Le devisement du monde*, 149: “La cité est bien assise que d’Ynde et de Baudas et de Masal et de Tremesor et de mains autres lieux y viennent les marchandises, si que pour ce y vient maint marchant latin et proprement Genevois pour acheter et pour faire leur affaires.”

⁹⁷ *The Travels of Ibn Battuta 1325-1354* ed. C. Defrémery and B. R. Sanguinetti and trans. H. A. R. Gibb (Cambridge, 1958), vol. 2, 415, 418.

⁹⁸ *Ibid.*, 476.

of Nicaea which the sources clearly state, it then seems that the bulk of that trade was handled by the western merchants, who except for the Venetians, would pay commercial taxes to the Nicaean authorities. Thus, even though agriculturally prosperous, not all of the wealth of this state's wealth came from the sales of eggs and agrarian goods. Income from the activities of the foreign merchants must have constituted an important section of its income.

This analysis of the written evidence has shown us these important points: first, that the attestations on foreign textiles and the references to opulence and the presence of both local and foreign products suggests that the Nicaean state, contrary to what scholars have until now argued, was in fact open to eastern and western trade and products. Theodore of Skoutariotes' explicit statement as well as those of Gregoras and Pachymeres also point in the same direction. Western written evidence, such as the Florentine document from 1245, trade agreement of 1219, as well as the documents from the Palaiologan period, present indirect but affirmative evidence on the presence of western merchants in Nicaean lands.

Nevertheless, the state of Nicaea was also a producer of fine ceramics and textiles. Zeuxippus ceramics were definitely exported to the west and the eastern Mediterranean. The evidence we discussed on textile production in Nicaea suggests that the Nicaean rulers were protective of the local textile industry. They seem not to

have allowed the exportation of raw silk and were likely not exporting alum either. Furthermore, John III tried to prevent the influx of foreign luxury textiles into the Nicaean state. In the long term his policies fell out of use and failed to prevent the exportation of raw silk, alum and the influx of foreign textiles. Nicaean rulers' regulations and restrictions on fine textiles might have lasted until about 1258 when the Palaiologans began to rule likely to adapt to the changing requirements of the political environment that emerged after Constantinople was regained in 1261.

Archaeological evidence of the first three parts also attest to Nicaean conservatism: we have seen that the Italian maiolica wares, which were imported to important production sites in Greece in the thirteenth century are not attested across the Aegean on Nicaean soil. In terms of the coin circulation too, we have been unable to encounter foreign issues in Nicaea, except for possibly in Priene and Anaia, up until the second half of the thirteenth century. Hence, this chapter modifies the current interpretation of the extent of the "protectionism" of the Nicaean state for we think that it extended to coin circulation as well as protection of the fine ceramic industry. This chapter ultimately argued for the significance of international trade in Nicaea as an important source of income for the state—an aspect of the Nicaean economy which has so far been overly downplayed.

In view of the sources discussed above, extending from the thirteenth to the fifteenth centuries, there is little doubt that the Italian, especially the Venetian—and in the second half of the thirteenth century, the Genoese—as well as the Pisan, Florentine, Lucchese and possibly the “Frankish” and Muslim merchants played an active role in trade in the eastern Mediterranean in the thirteenth century. Within that same context of the eastern Mediterranean, if our observations based on the trade treaty of 1219, Florentine and Genoese documents from before ca. 1262, the documents from the latter half of the thirteenth century, and our assumptions on alum trade are correct, the role of western merchants in Nicaea, was quite significant in supplying the Nicaean markets. In other words, the Nicaean economy was not “largely untouched by the direct currents of international trade,” as Angold argued.⁹⁹

⁹⁹ Angold, *A Byzantine Government in Exile*, 120.

General Conclusion

This study has investigated the transformation of the Mediterranean economy in the crucial period from the late eleventh through the thirteenth centuries from an unusual perspective. Rather than starting from the perspective of the “winners” in the new emerging global system of the late Middle Ages, it has looked at this watershed transformation from the vantage point of one of the signal “losers” in this great change. As such, it offers a new and unique perspective on the early phase of the rise of the global economic dominance. For once, rather than seeing this rise with eyes of the colonizers, we can observe this extraordinary shift from the perspective of the colonized, both literally and economically. At the beginning of the period we have studied, Byzantium was an important producer and exporter of both fine wares and fine textiles to the West. At the end, the roles were reversed, and the Byzantine territories were now mainly importers of finished products of differing values from the emerging economies of Italy and western Europe. Many of them were actually occupied and colonized by western Europeans.

While the question of the transformation of the Mediterranean economy has occupied historians for decades, this approach is a new one. Even more novel has been our evidentiary base. Until now, scholars have been forced to reconstruct this fundamental transformation from the written sources alone. We have exploited the Byzantine written sources and, thanks to new online resources such as the *Thesaurus*

Linguae Graecae (TLG), expanded the written evidence that historians can use to address this great question. Even more importantly, the burgeoning archaeological exploration of the former lands of the Byzantine Empire has produced considerable amounts of entirely new evidence. Much of that new archaeological evidence is only available in the “gray” or near “gray” literature of interim or summary archaeological reports published in Turkish and Modern Greek, or not published at all and available only by personal communication from the excavators. At the same time, a series of recent numismatic advances in the study of Byzantine coins, in textile studies, and particularly in the identification and classification of late Byzantine ceramics, have converged to yield unexpected new patterns and chronologies for all of these material embodiments of the late Byzantine economy.

The circulation patterns of coins have suggested important regional differences between the twelfth and the thirteenth centuries. Our analysis has shown that these differences were themselves grounded in the changes in the economic organization of the Byzantine Empire since the eleventh century. These changes emerge from multiple lines of evidence, which indicate that they favored industrialized development more heavily in southern Greece, in particular, in addition to already established production centers in Constantinople. We have been able to make this observation based on the overall picture drawn by the coin finds (both hoards and stray finds) and from the archaeological distribution of fine ceramics and luxury textile production. Hendy,

Laiou, Harvey and Kazhdan, in particular, argued for a similar development based primarily on written sources and, to a lesser extent, on the numismatic evidence. The general argument up to this point has maintained that, overall, mainland Greece and western Asia Minor both developed more or less equally even though definitely with more amplitude with respect to the rest of the empire. The general consensus of the scholarship has been that this equality of the great regions of the Byzantine Empire was disrupted only by the publically fragmented situation that was caused by the Fourth Crusade. This dissertation, on the other hand, has shown that the differences between these two regions already become visible after the middle of the eleventh, and especially during the twelfth century.

This new observation will inevitably need to be refined in the future with work more highly focused on smaller zones within those two regions. Our understanding will grow exponentially as archaeology and archaeological sciences advance. In terms of the dating and provenancing of fine textiles, in the future we will likely be able to distinguish the raw silk sources of the world's surviving historical silk textiles. Comprehensive scientific analyses of the petrological content of fine ceramics will tell us volumes about where fine ceramics were made, as well as their geographical and temporal distribution and how all three changed over time. There is a pressing need to organize this growing new material into one or more geodatabases that can be shared among the archaeologists, historians and art historians of not only the Aegean but also

all of the Mediterranean basin. Such geodatabases will place the Aegean region's international connections, and our own findings, into a broader perspective.

In terms of the overall development of the Byzantine economy, especially its capacity to export, Byzantine products (by which we of course mean again, the fine ceramics and luxury textiles) had considerable weight in the international markets of the twelfth century. As far as we can tell from the western inventories and testaments, some formerly Byzantine textile production sites remained functional and continued to export to the West in the thirteenth and the fourteenth centuries. Nevertheless, they yielded first place to Italian luxury textile producers, and among them especially, to Lucca. Our knowledge of Byzantine textile exports to its eastern, Muslim neighbors, however, has been hampered by lack of completed critical editions and translations from that part of the world. That said, evidence from the Cairo Geniza does show that Byzantine fine textiles were exported to Egypt down to the middle of the twelfth century. With regard to the Eastern evidence, given our limitations, unlike the Western evidence, we are yet unable to see how and when the overall picture of the Byzantine exports changes. This is largely because, although the Cairo Geniza contains evidence up until the middle of the thirteenth century, that evidence has not yet been published in full. Further studies on Arabic, Persian and Hebrew sources should produce more evidence about the Byzantine products that were imported to cities of that part of the world. This has the potential to refine and improve our surmise that the Byzantine fine

textile export trends to the East more or less mirrored those toward the West. It remains to be seen whether or not this was indeed the case.

In terms of Byzantium's ceramic exports, we have relatively sufficient evidence for both the East and the West. As such, we have seen that fine ceramic exports came to a virtual halt only in the second half of the thirteenth century after a relatively significant presence in the twelfth century. Overall then, our discussion has confirmed the broad outlines of the findings from the surviving Byzantine coins in the thirteenth and the fourteenth centuries in Byzantium's western and eastern neighbors: the presence of Byzantine coins, textiles and ceramics are significantly reduced in the thirteenth century with respect to the twelfth.

Nevertheless, within this general observation, even though Byzantium's capacity to export fine ceramics and luxury textiles was reduced *vis à vis* the twelfth century during the thirteenth century, the State of Nicaea emerges as an economic power among Byzantium's successor states in the thirteenth century. Our analysis of the production and distribution trends of the Zeuxippus wares and the presence of Anaia as one confirmed site where these wares were produced, urges us to look even more closely at western Asia Minor for production sites of this ware. In terms of the luxury textiles there is sufficient evidence that the Nicaean state continued to produce these products, although we know much less about its capacity to export. The overall evidence on Nicaea suggests that the certain key sectors of the Nicaean state's economy were even

more strictly regulated than previous scholars have suspected. Except for the coin finds from Anaia, and possibly from Priene, the coin evidence all together suggests that the Nicaean rulers sought strictly to regulate and indeed to exclude the circulation of foreign coins within their state. The lack of Italian maiolicas from the western shores of the Aegean seems to point in a similar direction, that is of a control on imports. We have, therefore, come one more step closer to understanding this important actor's economic policies in the thirteenth century and why all the signs of economic growth that we have studied there point toward a remarkable upward trend. That upward trend only begins to decline after the middle of the thirteenth century marked by the advent of the Palaiologan dynasty and the move to the old capital. The middle of the thirteenth century, of course, also corresponds to the opening of the silk and spice routes under the Mongol khans. Although this dissertation did not probe into its mechanics, the direct access Europeans gained to the products of the Near and the Far East must have played a crucial role in the drastic decline of Byzantine exports of fine ceramics and fine textiles beyond both its eastern and western borders. The impending Mongol threat and the theretofore unprecedented access the Europeans had to the eastern markets, places the conservatism and protectionism of the Nicaean rulers into a compelling historical context.

After the Fourth Crusade, Byzantium's connection with Western economies and culture was deeper, more voluminous and pervasive, but it had changed in nature.

Byzantine economy evolved alongside the Middle Eastern economies of which it was a part, from being a producer and exporter (with the profits that came from transforming raw materials into high value products) to being on the one hand, a large scale exporter of higher volume but lower value foodstuffs and raw materials. On the other hand, Byzantium became a lively market for western imports, presumably sending at least some of the profits for its exports back to the West in return for the new manufactured goods that came from Italy, Flanders, England and elsewhere.

After the first half of the thirteenth century Byzantium could no longer produce manufactured products able to compete with those produced in the West, especially after the Mongol conquest when the Westerners had direct access to the products and the manufactured articles of the Near and the Far East. Byzantine products lost their competitive edge in the Mediterranean and world markets. Byzantium became an importer of finished luxury textiles and it stopped exporting fine wares when the West was able to produce maiolicas and when the glazed ceramics of the East as well as Chinese porcelains were immediately accessible after the second half of the thirteenth century. Thereafter, Byzantium evolved into a supplier of raw materials for the growing Western industries. Set against the significant strides that the Western economy made in the thirteenth century, as we have outlined in the introduction, the same century, I argue, marks the beginning of the end of an era in which Byzantium's luxury textiles and ceramics were exported both to the East and the West. This was the face of the

proto-globalization of the late Middle Ages as experienced by one of the medieval Mediterranean's greatest civilizations and economies.

BIBLIOGRAPHY

Primary Sources and Reference Works

Agapitos, P., *Διηγήσεις Λιβιστρός και Ρόδαμνης. Κριτική έκδοση τῆς διασκευῆς α* (Athens, 2006).

Ahmet Eflaki, *Ariflerin Menkibeleri*, trans. T. Yazıcı, 2 vols. (Istanbul, 1973).

Anlade, J., *Les poésies de Peire Vidal* (Paris, 1913).

Babiniotes, G., *Ετυμολογικό Λεξικό της Νέας Ελληνικής Γλώσσας* (Athens, 2009).

Bakker W. F., and van Gemert, A. F., *Ιστορία τοῦ Βελισαρίου* (Athens, 1988).

Baldwin, B., trans., *Timarion. Translated with Introduction and Commentary* (Detroit, 1984).

Barsotti, R., *Gli Antichi inventari della cattedrale di Pisa* (Pisa, 1959).

Battaglia, S., *Grande dizionario della lingua Italiana*, 21 vols. and supplements (Torino, 1961-2009).

Bekker, I., ed., *Ioelis chronographia compendiaria* (Bonn, 1836).

Bekker, I., ed., *Michaelis Attaliothae historia* (Bonn, 1853).

Bekker, I., ed., *Georgius Cedrenus Ioannis Scylitzae opere*, 2 vols. (Bonn, 1838-1839).

Bekker, I., ed., *Theophanes Continuatus, Ioannes Cameniata, Symeon Magister, Georgius Monachus* (Bonn, 1938).

Benedetto, L. F., ed., *Marco Polo. Il Milione* (Florence, 1928).

Beyer, H.-V., *Nikephoros Gregoras, Antirrhetika I* (Vienna, 1976).

Bini, T., *I Lucchesia a Venezia. Alcuni studi sopra i secoli xiii e xiv* (Lucca, 1853).

Bompaire, J., *Actes de Xéropotamou. Archives de l'Athos 3* (Paris, 1964).

Bonnet, J. M., *Acta apostolorum apocrypha*, 3 vols. (repr. Hildesheim, 1972).

The Book of Marco Polo, trans. H. Yule and H. Cordier, 2 vols. (New York, 1903).

- Cecchetti, B., "Testamento di Pietro Vioni Veneziano fatto in Tauris (Persia) X Dicembre," *Archivio Veneto* 26 (1883), 161-165.
- Chazaud, M., "Inventaire et comptes de la succession d'études, comte de Nevers (Acre 1266)," *Memories de la société des antiquaires de France* 32 (1871), 164-206.
- Constable, O. R., with D. Zurro ed. and trans., *Medieval Iberia. Readings from Christian, Muslim and Jewish Sources* (Philadelphia, 2nd ed., 2012).
- Cross, S. H., and Sherbowitz-Wetzor, O. P., *The Russian Primary Chronicle. Laurentian Text* (Cambridge, M. A., 1953).
- Dagron, G., Lemerle, P., Ćirković, S., eds., *Actes de Saint-Pantéléèmon. Archives de l'Athos* 12 (Paris, 1982).
- Darrouzès, J., *Nicéas Stéthatos, Opuscles et Lettres* (Paris, 1961).
- Dart, J., *The History and Antiquities of the Cathedral Church of Canterbury* (London, 1726). (Also available via "Eighteenth Century Collections On-line." Accessed 9.7.2012).
- Davidsohn, R., *Forschungen zur Geschichte von Florenz*, 2 vols. (Berlin, 1896-1908).
- Demetrakos, D., *Μέγα Λεχικόν Όλης της Ελληνικης γλώσσης*, 15 vols. (Athens, 1964).
- Detorakes, Th., "Ερμηνεία τοῦ ψαλτῆρος," in I. Karabidopoulos, C. Oikonomou, D. G. Tsames, and N. Zacharopoulos (eds.), "Ἀγίου Νεοφύτου τοῦ Ἐγκλείστου," *Συγγράμματα* 4 (Paphos, 2001), 531-559.
- Dölger, F., Wirth, P., Müller, A. E., *Regesten der Kaiserurkunden des oströmischen Reiches von 565-1453*, 3 vols. with revised editions (Munich, 1924-2009).
- Delehay, H., *Acta Sanctorum Novembris* vol. 3 (Brussels, 1910).
- Dellacasa, S., ed., *I Libri iurium della Repubblica di Genova* vol. I/4 (Rome, 1998).
- Desimoni, C., "Actes passés à Famaguste de 1299 à 1301. Par devant le notaire Génois Lamberto di Sambuceto," *Révue de l'Orient Latin* 1 (1893), 58-353.
- Dorini, U., and Bertele, T., eds. *Il Libro dei conti di Giacomo Badoer* (Rome, 1956).

- Douet, L., *Nouveau recueil de comptes de l'argenterie des rois de France* (Paris, 1874).
- Drexl, F., *Achmetis Oneirocriticon* (Leipzig, 1925).
- Du Cange, C. F., *Glossarium ad scriptores mediae et infimae latinitatis*, 3 vols. (Frankfurt am Main, 1681). <http://clt.brepolis.net.ezp-prod1.hul.harvard.edu/dld/Default.aspx> (Last accessed 9.8.2012)
- Dumbarton Oaks (DO) Hagiography Database
<http://www.doaks.org/research/byzantine/resources/hagiography-database> (Last accessed 9.2.2012).
- Eideneier, H., *Ptochoprodromos. Einführung, kritische Ausgabe, deutsche Übersetzung, Glossar* (Cologne, 1991).
- Evans, A., ed., *Francesco Balducci Pegolotti, La Pratica della Mercatura* (Cambridge, 1936).
- Fagniez, G., "Inventaires du trésor de Notre Dame de Paris," *Révue archéologique* 27 (Jan-June, 1874), 249-259 and *Révue archéologique* 28 (July-December, 1874), 83-102.
- Failler, A., *Le version brève des Relations Historiques de Georges Pachymérès*, 2 vols. (Paris, 2001-2002).
- Failler, A., and Laurent, V., *Georges Pachymérès. Relations historiques*, 2 vols. (Paris, 1984).
- Favano, E., *Cassiere della bolla Ducale. Grazie-Novus Liber (1299-1305)*, (Venice, 1962).
- Festa, N., *Theodori Ducae Lascaris. Epistulae CCXVII* (Florence, 1898).
- Foss, C., ed. and trans. *Nicaea: A Byzantine Capital and Its Praises. With Speeches of Theodore Laskaris in Praise of the Great City of Nicaea* (Brookline, 1996).
- Fotheringham, J. K., *Marco Sanudo, Conqueror of the Archipelago* (Oxford, 1915).
- Francesco Datini archive (1363-1410)
http://www.istitutodatini.it/schede/archivio/home_e.htm (Accessed 7.8.2012).
- Gaisford, Th., *Etymologicum magnum* (repr. Amsterdam, 1967), 1-826.

- Gautier, P., *Nicéphore Bryennios. Histoire* (Brussels, 1975).
- Ghezzeo, M. P., Melville-Jones, J. R., Rizzi, A., eds. and trans. *The Morosini Codex, 4 vols.*, (Padua, 1999-2010).
- Goitein, S. D., *Letters of Medieval Jewish Traders, Translated from the Arabic with Introductions and Notes* (Princeton, 1973).
- Greco, V., *Georgios Sphrantzes. Memorie 1401-1477* (Bucharest, 1966).
- Godefroy, F., *Dictionnaire de l'ancienne langue française*, 10 vols. (Paris, 1881-1902) [online version : <http://www.classiques-garnier.com>, last accessed 9.2.2012].
- Golubovich, H., "Disputatio Latinorum et Graecorum seu relationis Apocrisiariorum Gregorii IX de gestis Nicaeae in Bithynia et Nymphaeae in Lydia (1234)," *Archivum Franciscanum Historicum* 12 (1919), 412-470.
- Guiraud, J., *Les registres d'Urbain IV (1261-1264)*, vol. 1 (Paris, 1901).
- Guillou, A., *Le Brébion de la métropole byzantine de région (vers 1050)*, (Vatican City, 1974).
- Hendrickx, B., "Régestes des empereurs latins de Constantinople (1204-1261/1272)," *Byzantina* 14 (1988), 7-221.
- Historiae patriae monumenta. Editi iussu regis Caroli Alberti. Liber iurium republicae Genuensis*, 22 vols. (Turin, 1836-1955).
- Hoberg, H., ed., *Die Inventare des päpstlichen schatzes in Avignon 1314-1376* (Vatican, 1944).
- Hörandner, W., *Theodoros Prodromos, Historische Gedichte* (Vienna, 1974).
- Horna, C., "Das Hodoiporikon des Konstantin Manasses," *BZ* 13 (1904), 325-347.
- Ibn Battuta* Defrémery, C., Sanguinetti, B.R., Gibb, H.A.R., eds., *The Travels of Ibn Battuta A.D. 1325-1354*, 3 vols. (Cambridge, 1958-1971).
- The Itinerary of Rabbi Benjamin of Tudela*, A. Asher, ed., and trans., (London, 1840).
- The Itinerary of Benjamin of Tudela*, M. N. Adler, ed., trans. and commentary (London, 1907).
- Jaubert, P.A., French trans. *Géographie d'Édrisi*, 2 vols., (Paris, 1836).

- Jenkins, R. J. H., *De Administrando Imperio. A Commentary* (Washington D.C., repr. 2012).
- Jugie, M., Petit, L. and Siderides, X.A., *Oeuvres complètes de Georges (Gennadios) Scholarios*, 8 vols. (Paris, 1928-1936).
- Jus Graecoromanum* eds. Io. Zepos and P. Zepos, 8 vols. (repr. Aalen, 1962).
- Kazazes, I. N. and Karanastases, T. A., *Επίτομη του Λεξικου της Μεσαιωνικής Ελληνικής Δημώδους Γραμματείας 1100-1669 του Εμμάνουηλ Κριαρά* (Athens, 2001).
- Koukoules, Ph., *Βυζαντινών βίος και πολιτισμός*, 6 vols. (Athens, 1948-1957).
- Krivochéine, B., and Paramelle, J., ed. and French trans., *Syméon le Nouveau Théologien, Catéchèses*, 3 vols. (Paris, 1963-1965).
- Kyriakidis, S., ed., "Eustazio di Tessalonica. La espugnazione di Tessalonica," *Testi e Momenti* 5 (1961), 3-158.
- Labarte, J., *Inventaire du mobilier de Charles V, Roi de France* (Paris, 1879).
- Lampros, J., ed., *Μιχαήλ Ἀκομινάτου τοῦ χωνιάτου τὰ σωζόμενα*, 2 vols. (Athens, 1879-1880).
- Lampros, S. P., *Παλαιολογία καὶ Πελοποννησιακά*, 4 vols. (Athens, 1912-1930).
- Lampsides, O., ed., *Μιχαήλ τοῦ Παναρέτου περὶ τῶν Μεγάλων Κομνηνῶν* (Athens, 1958).
- Lampropoulos, K., ed., *Ιωάννης Απόκαυκος· Σύμβολη στην έρευνα του βιού και του συγγραφικού έργου του* (Athens, 1988).
- Lefort, J., Oikonomidès, N. and Papachryssanthou, D., *Actes d'Iviron. II. Du milieu du XIe siècle à 1204*. Archives de l'Athos XIV (Paris, 1990).
- Lemerle, P., "Roga et rente d'état au Xe-XIe siècles," *REB* 25 (1967), 77-100.
- Lemerle, P., Guillou, A., Svoronos, N., eds., *Actes de Lavra. Edition diplomatique*. Archives de l'Athos 5, 8, 10-11 (Paris, 1970-1982).

- Lendari, T., *Αφήγησες Λιβιστρον και Ροδαμνης. The Vatican Version. Critical edition with Introduction, Commentary and Index-Glossary* (Athens, 2007).
- Leone, P. A. M., ed., *Ioannis Tzetzae Historiae* (Galatina, 2007).
- Life of St. Athanasia of Aegina* (BHG 180. Available in the DO Hagiography Database)
- Life of St. Theodora of Thessalonike* (BHG 1737-1738. Available in the DO Hagiography Database).
- Life of St. Nikon* (BHG 1366. Available in the DO Hagiography Database)
- Littlewood, A.R., ed. *Michaelis Pselli oratoria minora* (Leipzig, 1985).
- Liudprandus Cremonensis, *Relatio de legatione Constantinopolitana*, *Corpus Christianorum, Continuatio Mediaevalis*, 187-218 (<http://www.brepolis.net>. Accessed 2. 28. 2013).
- Lolos, A. C., *Zwei mittelgriechische Prosa-Fassungen des Alexanderromans*, 2 vols. (Königstein, 1983).
- Longnon, "Le Traité de Viterbe entre Charles I^{er} d'Anjou et Guillaume de Villehardouin, Prince de Morée (24 Mai 1267)," in *Studi in Onore di Riccardo Filangieri* vol. 1 (Naples, 1959), 307-314.
- Lopez, R., "Nota sulla composizione dei patrimoni privati nella prima meta del duecento," *Documenti e studi per la storia del commercio e del dritto commerciale italiano* 8 (1936), 207-264.
- Macrides, R., trans., *George Akropolites. The History* (Oxford, 2007).
- Magoulias, H.J., trans., *O City of Byzantium: Annals of Niketas Choniates* (Detroit, 1984).
- Marcovich, M., *Theodori Prodromi de Rhodanthes et Dosiclis amoribus libri ix* (Stuttgart, 1992).
- Mas Latrie, L., "Donation à l'abbaye de Cluny du monastère de Hiero Komio près de Patras en 1210," in *Bibliothèque de l'École des Chartes* vol. 5. 2nd series (Paris, 1848-1849), 308-312.

- McKee, S., ed., *Wills From Late Medieval Crete 1312-1420*, 3 vols. (Washington D. C., 1998).
- Ménard, P., et. al., ed., *Marco Polo. Le devisement du monde*, 6 vols. (Geneva, 2001-2009).
- Menéndez Pidal, R., *Cantar de mio Cid*, 3 vols. (Madrid, 1956).
- Mermier, G. R., *Béroutl. Tristran and Yseut Old French Text with Facing English Translation* (New York, 1987).
- Metzler, K., ed., *Eustathii Thessalonicensis De emendanda vita monachica* (Berlin, 2006).
- Mohler, L., *Kardinal Bessarion als Theologe, Humanist und Staatsmann*, 3 vols. (Paderborn, 1923-1942).
- The Mission of Friar William of Rubruck*, trans. P. Jackson (Indianapolis, 1990, repr. 2009).
- Montaner, A., *Cantar de mio Cid* (Barcelona, 2011).
- Moravcsik, G., ed., Jenkins, R. J. H., trans., *Constantine Porphyrogenitus. De Administrando Imperio*, 2nd ed. (Washington, D. C., 1967).
- Müller, K., ed., *Geographi Graeci minores*, 2 vols. (repr. Hildesheim, 1965).
- Oikonomides, N., ed., *Actes de Docheiariou. Archives de l'Athos 13*, 2 vols. (Paris, 1984).
- Perrat, C., and Longnon, J., *Actes relatifs à la principauté de Morée, 1289-1300* (Paris, 1967).
- Prášek, J. V., *De consuetudinibus et conditionibus orientalium regionum (translatio latina operis noti sub titulo 'Il Milione')*, (Prague, 1902).
- Ralles, G. A., and Potles, M., *Σύνταγμα των θείων και ιερών κανόνων των τε αγίων και πανευφήμων Αποστόλων*, 6 vols. (Athens, 1852-1859).
- Raffel, B., trans. *The Song of the Cid. A Dual-Language Edition with Parallel Text* (New York, 2009).
- Reallexikon der Byzantinistik*, P. Hirth, ed., 6 vols. (Amsterdam, 1968-1977).
- Reiske, J. J., *Constantini Porphyrogeniti imperatoris de cerimoniis aulae Byzantinae libri duo*, vol. 1 (Bonn, 1829).

- Riant, P.E.D., *Exuviae Sacrae Constantinopolitanae*, 3 vols. (Paris, 1877-1904).
- Richard, J., ed., *Simon de Saint-Quentin. Histoire des Tatares* (Paris, 1965).
- Ronchi, G., ed., *Milione. Le divisament dou monde* (Milan, 1982).
- Saewulf, *Peregrinatio*, ed. R. B. C. Huygens (Turnhout, 1994).
- Sargologos, É., *La Vie de Saint Cyrille le Philéote moine byzantin* (Brussels, 1964).
- Schreiner, P., "Zwei Denkmäler sur der frühen Paläologenzeit: ein Bildnis Michaels VIII. und der genueser Pallio," in M. Restle, ed., *Festschrift für Klaus Wessel zum 70. Geburtstag* (Munich, 1988), 249-258.
- Schweickard, W., *Deonomasticon Italicum. Dizionario storico dei derivati da nomi geografici e da nomi di persona*, 3 vols. with a supplement (Tübingen, 1997-2009).
- Ševčenko, I., ed. and trans. *Vita Basilii Imperatoris. Chronographiae quae Theophanis continuati nomine fertur liber quo Vita Basilii Imperatoris amplexitur* (Berlin, 2011).
- Siderides, A., "Μανουήλ Ὁλοβώλου Ἐγκώμιον εἰς Μιχαήλ Ἡ Παλαιολόγον," *Ἐπετηρίς Ἐταιρείας Βυζαντινῶν Σπουδῶν* 3 (1926), 168-191.
- Sinica Franciscana. Itinera et relationes Fratrum Minorum saeculi XIII et XIV*, A. van den Wyngaert, ed., vol. 1 (Florence, 1929).
- Sparrow Simpson, W., "Two Inventories of the Cathedral Church of St. Paul, London, Dated Respectively 1245 and 1402; now, for the First Time, Printed, with an Introduction," *Archaeologia* 50 (1887), 439-524.
- Starr, J., *The Jews in the Byzantine Empire 641-1204* (Athens, 1939).
- Stubbs, W., ed., *Radulfi de Diceto Decani Lundoniensis Opera Historica*, vol. 1 (Wiesbaden, 1876).
- Sullivan, D., trans., *The Life of Saint Nikon* (Brookline, 1987).
- Tannery, P., "Sciences exactes chez les Byzantins," *Mémoires scientifiques* 4 (Paris, 1920), 118-186.

- Tartaglia, L., *Encomio dell'imperatore Giovanni Duca e Teodoro II Duca Lascari* (Naples, 1990).
- Tietze, A., *Tarihi ve Etimolojik Türkiye Türkçesi Lugatı. Sprachgeschichtliches und etymologisches Wörterbuch des Türkei-Türkische*, 2 vols. (Istanbul, 2002).
- Tittmann, J. A. H., *Iohannis Zonarae lexicon ex tribus codicibus manuscriptis*, 2 vols. (repr. Amsterdam, 1967).
- Thomas, J., Constantinides-Hero, A., eds., *Byzantine Monastic Foundation Documents*, 5 vols. (Washington D.C., 2000).
- Thurn, J., *Ioannis Scylitzae synopsis historiarum* (Berlin, 1973).
- Veloudis, G., *Η φυλλάδα τοῦ Μεγαλέξαντρου. Διήγησις Ἀλεξάνδρου τοῦ Μακεδόνο*ς (Athens, 1977).
- Vranousi E., and Nystazopoulou-Pelekidou, M., *Βυζαντινά Ἐγγράφα της μόνης Πάτμου*, 2 vols. (Athens, 1980).
- Yazıcızade Ali, *Tevarih-i Âl-i Selçuk* ed. trans. A. Bakır (Istanbul, 2009).
- Wehr, H., *A Dictionary of Modern Written Arabic*, ed. J. M. Cowan (Wiesbaden, 1979).

Secondary Sources

- Abulafia, D., *Frederick II, A Medieval Emperor* (London, 1988).
- Agapitos, P., "Debate Genre, Structure and Poetics in the Byzantine Vernacular Romances of Love," *Symbolae Osloenses* (2004), 79:1, 7-101.
- Agius, D., *Classic Ships of Islam* (Leiden, 2008).
- Ahrweiler, H., "L'Histoire et la géographie de la region de Smyrne entre les deux occupations turques (1081-1317), particulièrement au XIII^e siècle," *TM* 1 (1965), 1-204.

Amouric, H., Richez F., and Vallauri, L., *Vingt Mille Pots sous les mers. Le Commerce de la céramique en Provence et Languedoc du Xe au XIXe siècle*, Musée d'Istres 27 Mai-28 Nov 1999 (Aix en Provence, 1999).

Andrews, D., and Pringle, D. "Lo Scavo dell'area sud del convento di San Silvestro Genova," *Archeologia Medievale* 4 (1977), 47-207.

Andrews, D., and Pringle, D., "Excavations in Medieval Genoa 1971-1976: the Palace and Convent of San Silvestro; with a Note on the Animal Bones by Judith Cartledge," in H. Blake, T.W. Potter and D. B. Whitehouse, eds., *Papers in Italian Archaeology*, BAR Supplementary Series 41, (Oxford, 1978), 29-54.

Angold, M., *A Byzantine Government in Exile: Government and Society under the Laskarids of Nicaea, 1204-1261* (London, 1975).

_____ "Belle époque or Crisis? (1025-1118)," in J. Shepard, ed., *The Cambridge History of the Byzantine Empire c. 500-1492* (Cambridge, 2008), 583-626.

_____ "After the Fourth Crusade: The Greek Rump State and the Recovery of Byzantium," in J. Shepard, ed., *The Cambridge History of the Byzantine Empire c. 500-1492* (Cambridge, 2008), 731-758.

_____ "The Latin Empire of Constantinople, 1204-1261: Marriage Strategies," in J. Herrin and G. Saint-Guillain, eds., *Identities and Allegiances in the Eastern Mediterranean after 1204* (London, 2011), 47-65.

Antonaras, A., "Two Venetian Vessels from Thessaloniki," *Museum of Byzantine Culture Journal* 6 (1999), 37-40.

Armstrong, P., "Some Byzantine and Later Settlements in Eastern Phokis," *BSA* 84 (1989), 1-47.

_____ "Zeuxippus Derivative Bowls from Sparta," ed. J. M. Sanders, *Lakonian Studies in Honour of Hector Catling*, (London, 1992), 1-9.

_____ "Byzantine Thebes: Excavations on the Kadmeia, 1980," *BSA* 88 (1993), 295-335.

- _____ "The Survey Area in the Byzantine and Ottoman Periods," in eds. W. Cavanagh, J. Crouwel, R. W. V. Catling and G. Shipley, *The Laconia Survey*, vol. I (London, 1996), 339-402.
- _____ "The Byzantine and Ottoman Pottery," in eds. W. Cavanagh, J. Crouwel, R.W. V. Catling and G. Shipley, *The Laconia Survey*, vol. II (London, 1996), 125-141.
- _____ "Byzantine Glazed Ceramic Tableware in the Collection of the Detroit Institute of Arts," *Bulletin of the Detroit Institute of Arts* 71 (1997), 4-15.
- _____ "A Group of Byzantine Bowls from Skopelos," *Oxford Journal of Archaeology* 10.3 (1991), 335-347.
- _____ "From Constantinople to Lakedaimon: Impressed White Wares," *Mosaic. Festschrift for A.H.S. Megaw*, eds. J. Herrin, M. Mullett and C. Otten-Froux, British School at Athens Studies 8 (London, 2001), 57-67.
- Arik, O., "Alanya Kalesi 2001 Yılı Çalışmaları," *KST* 24.2 (2002), 521-522.
- _____ "Alanya Kalesi 2004 Yılı Çalışmaları," *KST* 27.2 (2005), 213-228.
- Arthur, P., *Hierapolis. Archaeological Guide* (Istanbul, 2006).
- _____ "Byzantine and Turkish Glazed Ceramics in Southern Apulia, Italy," in B. Böhlendorf Arslan, H. Witte Orr, A. O. Uysal, eds., *Çanak. Late Antique and Medieval Pottery and Tiles in Mediterranean Archeological Contexts*, (Istanbul, 2007), 239-254.
- Ashton, R., "Coin Hoards. Turkey," *NC* 154 (1994), 284-288.
- Ashtor, E., *Levant Trade in the Later Middle Ages* (New Jersey, 1983).
- Asolati, M., Crisaffulli, C., *Ritrovamenti Monetali di età Romana nel Veneto*, (Padova, 1993), 6.1, 48/8-9, 51/1, 333; 6.3 17/1/13, 164.
- Aslanapa, O., Yetkin S., and Altun, A., *The Iznik Kiln Excavations* (Istanbul, 1989).
- Atasoy, N., Denny, W. B., Mackie, L. W., and Tezcan, H., *Ipek: the Crescent and the Rose: Imperial Ottoman Silks and Velvets* (London, 2001).

- Athanasoulis, D., and Baker, J., "Medieval Clarentza. The Coins 1999-2004 with Additional Medieval Coin Finds from the *nomos* of Elis," *NC* 168 (2008), 241-290.
- Atlan, S., *1947-1967 Yılları Side Kazıları Sırasında Elde Edilen Sikkeler* (Ankara, 1976).
- Auffray, D., "Commerçants et navigateurs arabes en Chine pendant le haut Moyen Âge," in eds. Y. Y. Al Hijji and V. Christides, *Aspects of Arab Seafaring. An Attempt to Fill in the Gaps of Maritime History* (Athens, 2002), 13-17.
- Babuin, A., Palioura, M., "Far Removed from Reality? A Brief Iconographical Survey on Byzantine and Muslim Ships," in Ch. G. Makrypoulas, ed., *Sailing Ships of the Mediterranean Sea and the Arabian Gulf* (Athens, 1998), 79-83.
- Baker, J., "Three Fourteenth Century Coin Hoards from Apulia Containing Gigliati and Greek Deniers Tournois," *RIN* 102 (2001), 219-280.
- _____, "Coin Circulation in Early Fourteenth Century Thessaly and South-Eastern Mainland Greece," in N. G. Moschonas, ed., *Money and Markets in the Palaeologan Era* (Athens, 2003), 293-336.
- _____, "Some Notes on the Monetary Life of the Dodecanese and its Microasiatic Peraia, ca. 1100-1400," *To Nomisma sta Dodekanesa kai th Mikrasiakitke tous Peraia. Obolos* 8 (2006), 351-377.
- _____, "Νομίσματα, Νομισματοκόπια και Νομισματοκοπεία στις Μεσαιωνικές Κυκλάδες, 13ος-15ος Αιώνας," in N. G. Moschonas and L. Stylianoudi, eds., *Il Ducato de l'Egeo. Atti dell'Incontro di Studio* (Athens, 2009), 333-385.
- _____, "Repertorio," in G. L. Mangieri, *Tornesi, gigliati e pirreali in un tesoretto rinvenuto a Muro Leccese* (Spoleto, 2010), 13-23.
- Baker J., and Calabria P., "Filignano (IS): Le monete Tardo Medievali," *RIN* 105 (2004), 265-300.
- Baker J., and Ponting, M., "The Early Period of Minting of Deniers Tournois in the Principality of Achaia (to 1289), and their Relation to the Issues of the Duchy of Athens," *NC* 161 (2001). 207-254.

- Bakırer, Ö., "The Medieval Pottery and Baked Clay Objects," in ed. M. N. van Loon, *Korucutepe. Final Report on the Excavations of the Universities of Chicago, California and Amsterdam in the Keban Reservoir, Eastern Anatolia 1968-1970*, vol. 3, (Amsterdam, 1980), 189-249.
- Bakirtzis, Ch., and Papanikola-Bakirtzis, D., "De la céramique byzantine à glaçure à Thessalonique," *Byzantino Bulgarica* VII (1981), 421-436.
- Bakirtzis, D., Maguire E., and Maguire, H., *Ceramic Art from Byzantine Serres* (Chicago, 1992).
- _____ *Byzantine Glazed Ceramics, The Art of Sgraffito* (Athens, 1999).
- _____ "Serres Ware," in ed. H. Maguire, *Materials Analysis of Byzantine Pottery* (Washington D.C., 1998), 135-156.
- _____ "Τριποδίσκοι ψησίματος των Βυζάντινων και μετά βυζάντινων Αγγείων," in Αμητος. *Τιμητικός Τόμος για τον Καθηγητή Μανόλη Ανδρόνικο* (Thessalonike, 1987), 641-648.
- _____ "Medieval Pottery from Enkomi, Famagusta," in V. Déroche and J.-M. Spieser, eds., *Recherches sur la céramique byzantine* (Paris, 1989), 233-246.
- _____ "Zeuxippus Ware: Some minor Observations," in *Mosaic. Festschrift for AHS Megaw* eds. J. Herrin, M. Mullett and C. Otten-Froux, *British School at Athens Studies* 8 (London, 2001), 131-133.
- Bakourou, A., Katsara, E., Kalamara, P., "Argos and Sparta: Pottery of the 12th and 13th Centuries," in ed. Ch. Bakirtzis, *VIIe Congrès International sur la Céramique Médiévale en Méditerranée* (Thessaloniki, 1999) (Athens, 2003), 233-236.
- Balard, M., "Les Génois en Roumanie entre 1204 et 1261. Recherches dans les minutiers notariaux génois," *Mélanges d'archéologie et d'histoire* 78 (1966), 467-502.
- Ball, J., *Byzantine Dress. Representations of Secular Dress in Eighth to Twelfth Century Paintings* (New York, 2005).
- _____ "Byzantine Clothing," ed. J. Condra, *The Greenwood Encyclopedia of Clothing through World History* vol. 1 (Westport and London, 2008), 117-152.

- Banck, A., *Byzantine Art in the Collection of the USSR* (Leningrad-Moscow, sine anno).
- Bardill, J., *Brickstamps of Constantinople* (Oxford, 2006).
- Barrett, J. H., Locker, A. M., Roberts, C. M., "Dark Age Economics' Revisited: the English Fish Bone Evidence AD 600-1600," *Antiquity* 78 (2004), 618-636.
- Bartlett, R., *The Making of Europe. Conquest, Colonization and Cultural Change 950-1350* (New Jersey, 1993).
- Bass, G.F., Matthews, S. D., Steffy, J. R., van Doorninck, F.H., eds., *Serçe Limanı. An Eleventh Century Shipwreck. The Ship and its Anchorage, Crew and Passengers* 2 vols., (College Station, 2004).
- Başaran, S., "Ortaçağ'da Enez (Ainos)," *Sanat Tarihi Dergisi* 9 (1998), 1-13.
- _____ "Enez 1998 Yılı Kazı ve Onarım Çalışmaları," *KST* 21. 2. (1999), 405-416.
- _____ "Enez 2000 Yılı Kazı ve Onarım Çalışmaları," *KST* 23. 2. (2001), 373-380.
- _____ "Enez 2001 Yılı Kazı ve Onarım Çalışmaları," *KST* 24. 2. (2002), 283-294.
- _____ "Enez 2003 Yılı Kazı ve Onarım Çalışmaları," *KST* 26. 2. (2004), 115-128.
- _____ "Enez 1996 Yılı Kazı ve Onarım Çalışmaları," *KST* 27. 2. (2005), 409-420.
- Bates, G. E., *Byzantine Coins, Archaeological Exploration of Sardis. Monograph 1* (Cambridge, Mass., 1971).
- Bauer, W., *A Greek-English Lexicon of the New Testament* trans. W. F. Arndt and F.W. Gingrich, (Chicago, 1957).
- Beckwith, J., "Byzantine Tissues," in *Actes du XIVe congrès international des études byzantines* (Bucarest, 1971), vol. 1, 343-353.
- Beihammer, A. ed., and German trans., *Griechische Briefe und Urkunden aus dem Zypern der Kreuzfahrerzeit. Die Formularsammlung eines königlichen Sekretärs im Vaticanus Palatinus Graecus 367* (Nicosia, 2007).
- Beksaç, E., "Adramytteion/Ören 2001 Yılı Kazısı," *KST* 24.1 (2002), 85-94.
- _____ "Adramytteion/Ören 2002 Yılı Kazısı," *KST* 25.2 (2003), 327-338.

- Bektaş, C., *Selçuklu Kervansarayları. Korunmaları, Kullanımları Üzerine bir Öneri* (Istanbul, 1999).
- Beldiceanu-Steinherr, I., "Notes pour l'histoire d'Alaşehir (Philadelphie) au XIV^e siècle," in *Philadelphie et autres études Byzantina-Sorbonensia-4* (Paris, 1984), 17-37.
- Belfanti, C. M., "Guilds, Patents, and the Circulation of Technical Knowledge," *Technology and Culture*, 45. 3 (2004), 569-589.
- Bell, A., Brooks, C., Dryburgh, P. R., *The English Wool Market c. 1230-1327* (New York, 2007).
- Bell, H. W., *Coins*, Publications of the American Society for the Excavation of Sardis, vol. 11 (Leiden, 1916).
- Bell, I. M., Robin, J.H. Clark, Gibbs, P. J., "Raman Spectroscopic Library of Natural and Synthetic Pigments," *Spectrochimic Acta Part A* (1997), 2159-2179.
- Bendall, S., "Byzantine Hoards," *CH* VII (1985), 234-242.
- Bender-Jørgensen, L., *North European Textiles until AD 1000* (Aarhus, 1991).
- Bernardi, M., "La ceramica medievale della cisterna C," in *La ceramica orvietana del Medioevo* (Orvieto, 1985), 41-48.
- Berti, S., Gelichi, S., and Mannoni, T., "Transformazioni tecnologiche nelle prime produzioni italiane con rivestimenti vetrificati (Secc. XII-XIII)," in G. Démians d'Archimbaud, ed., *La céramique médiévale en Méditerranée. Actes du VI^e Congrès de l' AIECM 2* (Aix en Provence, 1997), 383-403.
- Berti, S., and Mannoni, T., "Ceramiche medievali del mediterraneo occidentale; considerazioni su alcune caratteristiche tecniche," in *A Cerámica Medieval no Mediterráneo Occidental Lisboa 16-22 Novembro 1987* (Mertola, 1991), 163-174.
- Bikic, V., "Byzantine Models on Serbian Medieval Pottery," in ed. Ch. Bakirtzis, *Congrès international sur la céramique médiévale en Méditerranée* (Athens, 2003), 191-204.

- Bingöl, O., "Magnesia ad Meandrum," *KST* 8 (1987), 59-65.
- Bingöl, O., and Kökdemir, G. "Magnesia ad Meandrum 2002," *KST* 25.2 (2003), 371-380.
- Bellinger, A., *Catalogue of the Coins found at Corinth, 1925* (New Haven, 1930).
- _____. *Troy. The Coins* (New Haven, 1961).
- Bilici, S., "Alanya- Selçuklu Sarayı Seramikleri" *Uluslararası Sanat Tarihi Sempozyumu Prof. Dr Gönül Oney'e Armağan* (Izmir, 2002), 139-154.
- Bintliff, J., Howard P., and Snodgrass, A., *Testing the Hinterland. The Work of the Boeotia Survey (1989-1991) in the Southern Approaches to the City of Thespiiai* (Oxford, 2007).
- Bisson, T., *Crisis of the Twelfth Century* (Princeton, 2009).
- Blackman, M. J., and Redford, S., "Neutron Activation Analysis of Medieval Ceramics from Kinet, Turkey, Especially Port Saint Symeon Ware," *ANES* 42 (2005), 83-180.
- _____. "Calcerous Clay Ceramics from Gritille, Turkey," *Muqarnas* 11 (1994), 31-34.
- Blackman, D., "Archaeology in Greece 2001-2002," *Archaeological Reports* 48 (2001-2002), 1-115.
- Blackman, D., and Branigan, K., "An Archological Survey of the Lower Catchment of the Ayiofarango Valley," *BSA* 72 (1977), 13-84.
- Blake, H., "The Medieval Incised Slipped Pottery of North-West Italy," in *La ceramica medievale nel Mediterraneo occidentale* (Florence, 1986), 317-352.
- Blake, H., and Nepoti, S., "I Bacini di S. Nicolo di Ravenna e la ceramica graffita medievale nell'Emilia-Romagna," *Faenza* 70 (1984), 354-368.
- Bloch, M., *Feudal Society*, trans. L. A. Manyon and T. S. Brown (London, repr. 1989).
- _____. "Avènement et conquête du moulin à eau," repr. in G. Savridès, ed., *Marc Bloch. Mélanges historiques* (Paris, 2011), 800-821.

- Block, L., *To Harness the Wind. Short History of the Development of Sails* (Annapolis, 2003).
- Boehm, L., "De Karlingis Imperator Karolus, princeps et monarcha totius Europae," *Historisches Jahrbuch* 88 (1968), 1-35.
- Boehrer, B. T., *Parrot Culture: our 2,500-year-long Fascination with the World's Most Talkative Bird* (Philadelphia, 2004).
- Böhlendorf, B., "Die glazierte byzantinische Keramik der Beşik Tepe (Troas)," *Studia Troica* 7 (1997), 363-444.
- Böhlendorf-Arslan, B., *Glasierte byzantinische Keramik aus der Türkei*, 3 vols. (Istanbul, 2004).
- _____, "Die Beziehung zwischen byzantinischer und emiraszeitlicher Keramik," in *Ortaçağ'da Anadolu Prof Aynur Durukan'a Armağan* (Ankara, 2002), 135-146.
- _____, "Stratified Byzantine Pottery from the City Wall in the Southwestern Sector of Amorium," in B. Böhlendorf Arslan, H. Witte Orr, A. O. Uysal, eds. *Çanak. Late Antique and Medieval Pottery and Tiles in Mediterranean Archeological Contexts*, (Istanbul, 2007), 273-294.
- Borsari, S., "I Rapporti tra Pisa e gli stati di Romani nel Duecento," *Rivista Storica Italiana* 67 (1955), 477-492.
- Bortolotto, A. A., *Storia della Ceramica a Venezia, dagli albori all fine della Repubblica*, (Florence, 1981).
- Bourbouhakis, E., "Βυζαντινά και μεσαιωνικά μνημεία Κρήτης," *AD* 23. B. 2 (1968), 427-429.
- Bouiron, M., *Marseille, du Lacydon au faubourg Sainte-Catherine (Ve-XVIIIe s.). Les fouilles de la place du Général-de-Gaulle*, (Paris, 2001).
- Bresc, H., "Mûrier et ver à soie en Italie (Xe-XV- siècles)" in R. Durand, ed., *L'Homme et l'animal domestique et environnement du Moyen Age au XVIIIe siècle* (Nantes, 1993), 329-341.
- Brezeanu, S., "La politique économique des Lascarides à la lumière des relations vénéto-nicéennes," *Études byzantines et postbyzantines* I (1979), 39-54.

- Britnell, R., "Commerce and Markets," in J. Crick and E. Van Houts, eds. *A Social History of England, 900-1200* (Cambridge, 2011), 179-187.
- Brodersen, K., "Die geographischen schriften des 'Nikephoros Belmmydes'," in Ch. Schubert and K. Brodersen, eds., *Rom und der griechische Osten* (Stuttgart, 1995), 43-50.
- Brouscari, E., "Collection Paul Canellopoulos," *BCH* 112 (1988), 503-517.
- Bruneau, P., "Contribution à l'histoire urbaine de Délos à l'époque Hellénistique et à l'époque impériale," *BCH* 92. 2 (1968), 633-709.
- Bulgurlu, V., "Demre-Myra Aziz Nikolaos Kilisesi Kazısında Bulunan Sikkeler Hakkında Notlar," in K. Dörtlük, B. Varkıvanç et al., eds., *The Third Symposium on Lycia. Symposium Proceedings* vol. 1 (Antalya, 2006), 121-128.
- Bulliet, R., *Cotton, Climate, and Camels in Early Islamic Iran. A Moment in World History* (New York, 2009).
- Bulut, L., *Samsat Ortaçağ Seramikleri: Lüster ve Sıraltılar* (Izmir, 2000).
- Bulst, N., "L'essor (Xe-XIVe siècles)," in J.-P. Bardet and J. Dupaquier, eds., *Histoire des populations de l'Europe* (Paris, 1997), 168-184.
- Burham, D., *Warp and Weft. A Dictionary of Textile Terms* (New York, 1981).
- Burns, J., *Sea of Silk. A Textile Geography of Women's Work in Medieval French Literature* (Philadelphia, 2009).
- Buttrey, T. V., Johnston, A., MacKenzie K. and Bates, M., *Greek Roman and Islamic Coins from Sardis* (Cambridge, 1981).
- Bynum, C. W., *Christian Materiality. An Essay on Religion in Late medieval Europe* (New York, 2011).
- Byrne, E., *Genoese Shipping in the Twelfth and Thirteenth Centuries* (Cambridge, Mass., 1930).

- Cabona, D., Gardini, A., Pizzolo, O., "Nuovi dati sulla circolazione delle ceramiche mediterranee dallo scavo di Palazzo Ducale a Genova (secc. XII-XIV)," in *La ceramica medievale nel Mediterraneo occidentale* (Florence, 1986), 453-482.
- Cahen, C., *Pre-Ottoman Turkey: A General Survey of the Material and Spiritual Culture and History c. 1071-1330*, trans. J. J. Williams (London, 1968).
- _____ "L'alun avant Phocée. Un chapitre d'histoire économique islamo-chrétienne au temps de Croisades," in Cahen, C., *Turcobyzantina et Oriens Christianus* (London, 1974), I, 433-447.
- Caiger-Smith, A., *Tin-Glaze Pottery in Europe and the Islamic World. The Tradition of 1000 Years in Maiolica, Faience and Delftware*, (London, 1973).
- Callegher, B., "Presenza di 'folles anonimi' in Italia settentrionale: Un' ipotesi interpretativa," *Numismatica e Antichità Classiche* 28 (1994), 293-312.
- _____ "Monete medioevali dei secoli XI-XIII in Friuli. Ripostigli e singoli rinvenimenti" in R. Härtel, *Die Friesacher Münze im Alpen-Adria-Raum* (Graz, 1996), 339-362.
- _____ "Presenza di monete bizantine nelle Marche," *Atti e Memorie* 102 (1997), 59-78.
- _____ *Monete bizantine, ostrogote e longobarde della Collezione Adriani nel Museo Civico di Cherasco* (Cherasco, 2008), 86-91.
- Callegher, B., and Morrisson, C., "Miliareni de Follibus: La Trouvaille de Folles Byzantins de Cannes (milieu du Xe siècle)," in *Puer Apuliae. Mélanges offerts à Jean-Marie Martin*, ed. E. Cuozzo, V. Déroche, A. Peters-Custot et V. Prigent (Centre de recherche d'Histoire et Civilisation de Byzance, Monographies 30), (Paris, 2008), 553-550.
- Campbell, S., *The Malcove Collection. A Catalogue of the Lillian Malcove Collection of the University of Toronto*, (Toronto, 1985).
- Canard, M., "Le traité de 1281 entre Michel Paléologue et le Sultan Qalāun," *Byzantion* 10 (1935), 669-680.

- Caramessini-Oeconomides, M. "Contribution à l'étude de la circulation des monnaies byzantines en Grèce au XIIIe siècle," in *Actes du XVe congrès international d'études byzantines* 2.A (Athens, 1981), 121-128.
- Cardon, D., (English trans.) *Natural Dyes Sources, Tradition, Technology and Science* (London, 2007).
- Carolus-Barré, L., "Objets précieux et monnaies retrouvés dans le port de Trapani, en 1270, dont 21 écus d'or de Saint Louis," *RN*° 28 (1976), 114-118.
- Carus-Wilson, E., "The Woolen Industry," in eds. M.M. Postan, E. Miller and C. Postan, *The Cambridge Economic History of Europe. Trade and Industry in the Middle Ages*, vol. 2 (Cambridge, 1987), 355-428.
- Cecchetti, B., *La vita dei veneziani nel 1300. Le vesti* (Venice, 1886).
- Ceylan, A., "VI. Dönem Hierapolis Roma Hamam Kazısı" 9. Müze Kurtarma Kazıları *Semineri* (Ankara, 1999), 277-290.
- Charanis, P., "Observations on the Demography of the Byzantine Empire," *Thirteenth International Congress of Byzantine Studies, Main Papers XIV* (Oxford, 1966), 456-61.
- Chaudhuri, K. N., *Asia before Europe. Economy and Civilization of the Indian Ocean from the Rise of Islam to 1750* (Cambridge, 1990).
- Choceyras, J., *Réalité et imaginaire dans le Tristan de Bérout* (Paris, 2010).
- Ciasca, R., *L'arte dei medici e speziali nella storia e nel commercio fiorentino dal secolo XII al XV*. (Florence, 1927).
- Čimbuleva, J., "Vases à glaçure en argile blanche de Nessebre," in ed. V. Velkov, *Nessebre*, (Sofia, 1980), 202-253.
- Ciocîltan, V., *The Mongols and the Black Sea Trade in the Thirteenth and Fourteenth Centuries*, trans. S. Willcocks (Leiden, 2012).
- Cipolla, C. M., *Before the Industrial Revolution. European Society and Economy 1000-1700*, 2nd ed. (London, 1981).

-
- _____. "The Diffusion of Innovations in Early Modern Europe," *Comparative Studies in Society and History* 14. 1 (1972), 46-52.
- Çolak, M., Thirion-Merle, V., Blondé, F., Picon, M., 'Les régions productrices d'alun en Turquie aux époques antique médiévale et moderne: gisements, produits et transports,' in P. Bogard, J. P. Brun and M. Picon, eds., *L'alun de Méditerranée* (Aix en Provence, 2005), 58-68.
- Coleman, J., *Excavations at Pylos in Elis* (New Jersey, 1986).
- Clanchy, M. T., *From Memory to Written Record. England 1066-1307* (London, 3rd edition, 2013).
- Crawford, J.S., *Byzantine Shops at Sardis* (Cambridge Mass., 1990).
- Crowford, E., Pritchard F., Staniland, K., *Textiles and Clothing c. 1150-c. 1450* (Suffolk, 2001).
- Crummy, "From Self-Sufficiency to Commerce: Structural and Artifactual Evidence for Textile Manufacture in Eastern England in the Pre-Conquest Period," in D. G. Koslin and J. Snyder, *Encountering Medieval Textiles and Dress. Object, Texts, Images* (New York, 2002), 25-43.
- Dawkins, R. M., and Droop, J. P., "Byzantine Pottery from Sparta," *BSA* 17 (1910-11), 23-28.
- Dawson, T., "Propriety, Practicality and Pleasure: the Parameters of Women's Dress in Byzantium, A.D. 1000-1200," *Byzantine Women: Varieties of Experience 800-1200*. ed. L. Garland, (Aldershot, 2006), 41-75.
- D'Amico, E., "Glazed White Ware in the Italian Peninsula: Proposals for a Study," in B. Böhlendorf Arslan, H. Witte Orr, A. O. Uysal, eds., *Çanak. Late Antique and Medieval Pottery and Tiles in Mediterranean Archeological Contexts*, (Istanbul, 2007), 214-238.
- D'Andria, F. and Whitehouse, D., eds. *Excavations at Otranto II* (Lecce, 1992).
- D'Angelo, F., "Aspetti della produzione della ceramica siciliana e scambi commerciali nel Mediterraneo durante il Medioevo," in *Atti del Convegno Internazionale della Ceramica*. Issue 5 (Albisola, 1972), 129-138.

- D'Angelo, F., "Le protomaioliche rinvenute a Marsala ed il loro rapporto con le ceramiche magrebine e le graffite tirreniche," *Archeologia Medievale* 18 (1991), 765-770.
- d'Archimbaud, D. G., *Les Fouilles de Rougiers* (Valbonne, 1980).
- Demirel-Gökalp, Z., "Yalvaç ve Isparta Arkeoloji Müzelerinde Bulunan Bizans Sikkeleri," Unpublished Ph.D. Thesis, (Anadolu Üniversitesi Sosyal Bilimler Enstitüsü, Eskişehir, 2007).
- Dengate, J., "Coin Hoards from the Gymnasium Area at Corinth," *Hesperia* 50. 2 (1981), 147-188.
- Desimoni, C., "I Genovesi ed i loro quartieri in Constantinopoli nel século XIII," *Giornale Ligustico* (Genoa, 1874), 217-275.
- de Roover, R., "The Traveling Trade before 1300," in *Cambridge Economic History of Europe*, M. M. Postan, E. E. Rich and E. Miller, eds., vol. 3 (Cambridge, 1965), 46-69.
- Desrosiers, S., ed., in coll. with G. Cornu, V. Huchard, F. Valantin, T. Bouzid, *Soieries et autres textiles de l'Antiquité au XIVe siècle* (Paris, 2004).
- di Cosmo, N., "Venice, Genoa, The Golden Horde, and the Limits of European Expansion in Asia," in F. Schmieder and P. Schreiner, eds., *Il Codice Cumanico e il suo mondo: atti del colloquio internazionale* (Rome, 2005), 279-296.
- Dimopoulos, J., "Byzantine Graffito Wares Excavated in Sparta (12-13 Centuries in B. Böhlendorf Arslan, H. Witte Orr, A. O. Uysal, eds., *Çanak. Late Antique and Medieval Pottery and Tiles in Mediterranean Archeological Contexts*, (Istanbul, 2007), 335-348.
- _____, "Trade of Byzantine Red Wares, End of the 11th -13th Centuries," M. M. Mungo, ed., *Byzantine Trade, 4th- 12th Centuries* (Surrey, 2009), 179-190.
- Doğer, L., *Izmir Arkeoloji Müzesi Örnekleriyle Kazıma Dekorlu Ege-Bizans Seramikleri* (Izmir, 2000).
- _____, "Bizans Seramikleri," *Antik & Dekor* 55 (1999), 148-151.

- _____ "Izmir Arkeoloji Müzesindeki Bitkisel Bezemeli Sgraffito Bizans Kapları,"
OLBA 4 (2001), 209-223.
- _____ "Anaia-Kuşadası Kadıkalesi Kazısı 2002 Yılı Bizans Dönemi Seramik
Buluntularının Ön Değerlendirmesi," *Sanat Tarihi Dergisi* 13.1 (2004), 1-31.
- _____ "Byzantine Ceramics: Excavations at Smyrna Agora (1997-98 and 2002-2003),"
in eds. B. Böhlendorf Arslan, H. W. Orr, A. O. Uysal, Çanak. *Late Antique
and Medieval Pottery and Tiles in Mediterranean Archeological Contexts*,
(Istanbul, 2007), 97-122.
- Doonan, O. P. *Sinop Landscapes. Exploring Connection in a Black Sea Hinterland*
(Philadelphia, 2004).
- Dorner, F. K., Goell, T., *Arsameia am Nymphaios. Die Ausgrabungen im Hierothesion des
Mithradates Kallinikos von 1953-1956* (Berlin, 1963).
- Dore, E., Velissariou, P., Michaelides, M., *Κάτο Καστρο. Η Πρώτη Φάση των
Ανασκαφών τσο Νενετικό Φρούριο της Χώρας Άνδρου* (Andros, 2003).
- Duby, G., *Rural Economy and Country Life in the Medieval West*, trans. C. Postan (New
York, 1968).
- Ducellier, A., and Kaplan, M., *Byzance. IV^e-XV^e siècle* (Paris, 1996).
- Dunn, A., "The Rise and Fall of Towns, Loci of Maritime Traffic, and Silk Production:
the Problem of Thisvi-Kastoria," in E. Jeffreys, ed., *Byzantine Style, Religion
and Civilization* (Cambridge, 2006), 38-71.
- Duplessy, J., *Les monnaies françaises royales de Hugues Capet à Louis XVI (987-1793)*, 2 vols.
(Paris, 1988-1989).
- _____ "La datation des *deniers tournois* de Saint Louis," in *Proceedings of the 9th
International Congress of Numismatics, Berne, September 1979*, vol. 2
(Louvain-la-Nueve, 1982), 885-890.
- Duplessy, J. and Metcalf, D., "Le trésor de Samos et la circulation monétaire en orient
Latin aux XII^e et XIII^e siècles," *Revue belge de numismatique* 108 (1962), 172-
207.

- Durak, K., "Commerce and Networks of Exchange between the Byzantine Empire and the Islamic Near East from the Early Ninth Century to the Arrival of the Crusaders" (Unpublished Ph.D. Dissertation, Harvard University, 2008).
- _____. "The Location of Syria in Byzantine Writing: One Question, Many Answers," *JTS* 36 (2011), 45-55.
- Durliat, J., *De la ville antique à la ville byzantine* (Rome, 1990).
- Eastwood, W. J., Roberts, N., and Lamb, H. F., "Palaeoecological and Archaeological Evidence for Human Occupance in Southwest Turkey: The Beyşehir Occupation Phase," *Anatolian Studies* 48 (1998), 69-86.
- Ebersolt, E., *Catalogue des potteries byzantines et anatoliennes de Musée de Constantinople* (Constantinople, 1910).
- Edwards, K. M., *Corinth VI Coins 1896-1923* (Cambridge M.A., 1933).
- _____. "Report on the Coins Found in the Excavations at Corinth during the Years 1930-1935," *Hesperia* Vol. 6. 2 (1937), 241-256.
- Ellenblum, R., *The Collapse of the Eastern Mediterranean. Climate Change and the Decline of the East, 950-1072* (Cambridge, 2012).
- Engel, A., and Serrure, R., *Traité de numismatique du moyen âge*, vol. 2 (Paris, 1894).
- England, A., Eastwood, W. J., Roberts, C. N., Turner, R., and Haldon, J. F., "Historical Landscape Change in Cappadocia (Central Turkey): a Palaeoecological Investigation of Annually Laminated Sediments from Nar Lake," *The Holocene* 18 (2008), 1229 –1245.
- Ennen, E., *The Medieval Town*, trans. N. Fryde (Amsterdam, 1979).
- Epstein, S. R., "Introduction. Town and Country in Europe, 1300-1800," in S. Epstein, ed., *Town and Country in Europe, 1300-1800* (Cambridge, 2001), 1-29.
- _____. "Craft Guilds, Apprenticeship, and Technological Change in Preindustrial Europe," *The Journal of Economic History* 58. 3 (1998), 684-713.
- Erzen, A., "1981 Yılı Enez Kazısı," *KST* 4 (1982), 285-290.

- _____ "1985 Yılı Enez Kazısı," *KST* 8. 2 (1986), 273-290.
- _____ "1986 Yılı Enez Kazısı," *KST* 9. 2 (1987), 279-297.
- _____ "1987 Yılı Enez Kazısı," *KST* 10. 2 (1988), 89-108.
- _____ "1992 Yılı Enez Kazısı," *KST* 15. 2 (1993), 455-473.
- Erzen A., and Kaygusuz, I., "Trakya'da Enez (Antik Ainos) Kazılarında Bulunan Bizans Altın Sikkeleri (26 Resimle Birlikte)," *Belleten* 52. 203 (1988), 429-443.
- Falke, O., *Kunstgeschichte der Seidenweberei* (Berlin, 1913).
- Farelli, R. B., "Tessuti e ricami," in *Il Tesoro della Basilica di San Francesco ad Assisi* (Assisi, 1980), 77-85.
- Faroghi, S., and Neuman, C. K., eds., *Ottoman Costumes. From Textile to Identity* (Istanbul, 2004).
- Flecker, M., "A 9th-century Arab or Indian Shipwreck in Indonesian Waters," *IJNA* 29.2 (2000), 199-217.
- Fleet, K., *European and Islamic Trade in the Early Ottoman State* (Cambridge, 1999).
- Fleming, R., "Land Use and People," in J. Crick and E. Van Houts, eds. *A Social History of England, 900-1200* (Cambridge, 2011), 15-37.
- Flury-Lemberg, M., *Textile Conservation and Research*, trans. P. Leibungut (Bern, 1988).
- Folda, J. *Crusader Art in the Holy Land, from the Third Crusade to the Fall of Acre 1187-1291* (New York, 2005).
- Forsén J., and Forsén, B., *The Asea Valley Survey. An Arcadian Mountain Valley from the Palaeolithic Period until Modern Times* (Stockholm, 2003).
- Foss, C., "Smyrna," on-line ODB.
- Fozzati, L., L. Ca' Vedramin Calergi. *Archeologia urbana lungo il Canal Grande di Venezia* (Venice, 2005).
- François, V., *La céramique byzantine à Thasos, Études Thassiennes* 16 (Athens, 1995).

- _____ “La céramique byzantine à Thasos,” in ed. S. Gelichi, *La Ceramica nel mondo bizantino tra 11e 15 secolo e i suoi rapporti con l’Italia* (Florence, 1993), 317-331.
- _____ “Une céramique peinte à l’engobe découverte en Méditerranée orientale,” *Anatolia Antiqua* 3 (1995), 203-217.
- _____ “Contribution à l’étude d’Alexandrie islamique; la céramique médiévale de Kom el Dikka et Kom el Nadoura,” *Alessandria e il mondo ellenistico-romano*, (Rome, 1995), 314-322.
- _____ “Les ateliers de céramique byzantine de Nicée/Iznik et leur production (Xe-début XIVe siècle),” *BCH* 121/1 (1997), 411-442.
- _____ “Céramiques importées à Byzance: une quasi-absence,” *Byzantinoslavica* 58. 2 (1997), 387-404.
- François, V., and Spieser, J. M., “Pottery and Glass in Byzantium,” *EHB* 2, 593-609.
- Franz, A., “Middle Byzantine Pottery in Athens,” *Hesperia* 7.3 (1938), 429-467.
- Fraser, V. M., *The Songs of Peire Vidal. Translation and Commentary* (New York, 2006).
- Freedman, P., *Out of the East. Spices and the Medieval Imagination* (Princeton, 2008).
- Frick, C. C., *Dressing Renaissance Florence; Families, Fortunes, and Fine Clothing* (Baltimore, 2002).
- Friedrich, G., *Theologisches Wörterbuch zum Neuen Testament*, 10 vols., (Stuttgart, 1932-1979).
- Gabrieli, F. *Arab Historians of the Crusades* (London, 1969).
- Galane-Krikou, M., Nikolaou, G., Oikonomidou, M., Penna, V., Touratsoglou, Io., Tsourte, E., *Σύνταγμα βυζαντινών ‘θησαυρών του Νομισματικού Μουσείου* (Athens, 2002).
- Galane-Krikou, M., “Συμβολή στην κυκλοφορία βενετικών γρόσσι ΙΓ’- ΙΔ’ Αι. στον ελλαδικό χώρο,” *AAA* 21 (1988), 163-183.

- Gardini, A., "La ceramica bizantina in Liguria," in ed. S. Gelichi, *La Ceramica nel mondo bizantino tra 11e 15 secolo e i suoi rapporti con l'Italia* (Florence, 1993), 47-77.
- Gardini, A., Goricchi R. and Odone, P., "I Tipi ceramici usati a Genova dai Fieschi nei secoli XIII e XIV," in *Atti del Convegno Internazionale della Ceramica* (Albisola, 1972), 38-40.
- Galane-Krikou, M., and Tsourte, E., "Μακεδονική Πεντίνα. Η νομισματική μαρτυρία (ανάσκαφες 1976-1996)" in *Το νόμισμα στο μακεδονικό χωρό* (Thessalonike, 2000), 347-354.
- Gelichi, S., "La ceramica ingubbiata medievale nell'Italia nord-orientale," in *La ceramica medievale nel Mediterraneo occidentale* (Florence, 1986), 353-407.
- _____, "The Future of Venice's Past and the Archaeology of the North Eastern Adriatic Emporia during the Early Middle Ages," in ed. J. G. Schryver, *Studies in the Archaeology of the Medieval Mediterranean* (Leiden, 2010), 175-210.
- _____, "La Ceramica bizantina in Italia e la ceramica italiana nel Mediterraneo Orientale tra XII e XIII secolo: Stato degli studi e proposte di ricerca," in ed. S. Gelichi, *La Ceramica nel mondo bizantino tra 11e 15 secolo e i suoi rapporti con l'Italia* (Florence, 1993), 9-46.
- Geltner, G., " 'The Best Place in the World:' Imagining Urban Prisons in Late Medieval Italy," in *Cities, Texts and Social Networks, 400-100. Experience and Perceptions of Medieval Urban Space*, C. Goodson, A. E. Lester and C. Symes, eds. (Cornwall, 2010), 263-278.
- Genicot, L., *Rural Communities in the Medieval West* (Baltimore, 1990).
- _____, "On the Evidence of Growth of Population in the West from the Eleventh to the Thirteenth Century," in S. L. Thrupp, ed., *Change in Medieval Society. Europe North of the Alps, 1050-1500* (New York, 1969), 14-29.
- Gerber, H., *Economy and Society in an Ottoman City: Bursa, 1600-1700* (Jerusalem, 1988).
- Goldthwaite, R. A., *The Economy of Renaissance Florence* (Baltimore, 2009).

- Gondonneau, A., Guerra, M.F., "The Circulation of Precious Metals in the Arab Empire: the Case of the Near and the Middle East," *Archaeometry* 44.4 (2002), 573-599.
- Gosonová, A., "Textiles," in on-line *ODB* (accessed 7.15.2011).
- Gough, M., *Alahan. An Early Christian Monastery in Southern Turkey* (Wetteren, 1985).
- The Great Palace of the Byzantine Emperors. Report of the Walker Trust (The University of St Andrews) 1935-1939*, (London, 1947).
- Georgiades, N. Th., "Ανάλυση της χημικής σύστασης Βυζαντινών νομισμάτων (1204-1453) με τη μέθοδο XRF," *Byzantiaka* 25 (2005-2006), 191-206.
- Gregory, T., "Late Byzantine Pottery from Isthmia: New Evidence from the Korinthia," in V. Déroche and J.-M. Spieser, *Recherches sur la céramique byzantine* (Paris, 1989), 200-208.
- _____ "Local and Imported Ware from Isthmia," in ed. S. Gelichi, *La Ceramica nel mondo bizantino tra 11e 15 secolo e i suoi rapporti con l'Italia* (Florence, 1993), 283-306.
- Gregory, T., and Kardulias P. N., "Geophysical and Surface Surveys in the Byzantine Fortress at Isthmia 1985-1986," *Hesperia* 59. 3 (1990), 467-511.
- Grierson, P., *Byzantine Coins* (Berkeley and Los Angeles, 1982).
- _____ "A German Crusader's Hoard of 1147 from Side (Turkey)," in *Lagom. Festschrift für Peter Berghaus zum 60. Geburststag am 20. November 1979* (Münster, 1981), 195-203
- _____ "The Interpretation of Coin Finds 1," *NC*⁷ 5 (1965), repr. in *idem., Later Medieval Numismatics (11th-16th Centuries)*, XXI (London, 1979), i-xvi.
- _____ "The Interpretation of Coin Finds 2," *NC*⁷ 6 (1966), repr. in *idem., Later Medieval Numismatics*, XXII (London, 1979), i-xv.
- _____ "The Date and Fineness of Byzantine 'neatly-clipped' Trachea," *NCirc* 83. 2 (1975), 58.

- _____ "The Fineness of the Venetian Ducat and its Imitations," in ed. W. A. Oddy, *Metallurgy in Numismatics* vol. 2 (London, 1988), 95-105.
- Gropengiesser, H., "Byzantinische Münze aus dem Gebiet des Antiken Goldbergwerks bei Kinyra auf Thasos," *Schweizerische Numismatische Rundschau. Revue Suisse de Numismatique* 60 (1981), 73-81.
- Grube, E., *Islamic Pottery of the Eighth to the Fifteenth century in the Keir Collection* (London, 1976); M. Jenkins-Madina, *Raqqa revisited. Ceramics of Ayyubid Syria* (New York, 2006).
- Guarnieri, C., and Librenti, M., "Ferrara, Via Vaspergolo-Corso Porta Reno: ceramiche ingobbiate importate dall'area bizantina" in ed. Ch. Bakirtzis, *Congrès international sur la céramique médiévale en Méditerranée* (Athens, 2003), 227-232.
- Guillou, A., "Inscriptions byzantines d'Italie sur tissu," in I. Ševcenko and I. Hutter eds. *Aetos: Studies in Honour of Cyril Mango Presented to Him on April* (Stuttgart, 1998), 172-176.
- Guilmartin, J. F., *Gunpowder and Galleys. Changing Technology and Mediterranean Warfare at Sea in the Sixteenth Century* (Cambridge, 1974).
- Günsenin, N., "1994 Yılı Marmara Adaları Sualtı Araştırması," *AST* 13 (1995), 357-373.
- _____ "1995 Yılı Marmara Adaları Sualtı Araştırması," *AST* 14 (1996), 97-105.
- _____ "From Ganos to Serçe Limanı: Social and Economic Activities in the Propontis Illuminated by Recent Archeological and Historical Discoveries," *INA* 26.3 (1999), 18-22.
- _____ "L'Épave de Çamaltı Burnu I (Ile de Marmara, Proconnèse) résultats des campagnes 2001-2002," *Anatolia Antiqua* 11 (2003), 361-376.
- _____ "Ganos: résultats des campagnes de 1992-1993," *Anatolia Antiqua* 3 (1995), 165-178.
- _____ "A Thirteenth-Century Wine Carrier: Çamaltı Burnu, Turkey," in ed. G. F. Bass, *Beneath the Seven Seas. Adventures with the Institute of Nautical Archaeology* (London, 2005), 118-123.

- Günsenin, N., and Armstrong, P., "Glazed Pottery Production at Ganos," *Anatolia Antiqua* 3 (1995), 179-201.
- Hahn, M., "Byzantine and Postbyzantine Pottery from the Greek-Swedish Excavations at Hania, Crete," in V. Déroche and J.-M. Spieser, eds., *Recherches sur la céramique byzantine* (Paris, 1989), 227-246.
- Hall, J., and Atherden, M., "The Contribution of Pollen Analysis to the Study of Medieval Crete," in J. Bintliff and H. Stöger, *Medieval and Post Medieval Greece. The Corfu Papers* (Oxford, 2009), 55-66.
- Hanfmann, G., and Waldbaum, J., *A Survey of Sardis and the Major Monuments outside the City Walls* (Cambridge Mass., 1975).
- Hanfmann, G., and Jacobs, S., *Archeological Exploration of Sardis* (Cambridge, M. A., 1975).
- Harverson, "Asia," in *Encyclopedia Iranica* On-line. Originally Published: December 15, 1987. Accessed in <http://www.iranicaonline.org/articles/asia-or-asiab-mill#pt2> (Accessed 10.25.2012).
- Harvey, A., *Economic Expansion in the Byzantine Empire 900-1200* (Cambridge, 1989).
- _____. "Economy," in J. Harris, ed., *Palgrave Advances in Byzantine History* (New York, 2005), 83-99.
- Haskins, C. H., *The Renaissance of the Twelfth Century* (Cambridge Mass., 1927).
- Hayes, J. W., *Excavations at Sarachane in Istanbul* vol. 2 *The Pottery*, (New Jersey, 1992).
- _____. "The Excavated Pottery from the Bodrum Cami," in C. Striker, ed., *The Myrelaion in Istanbul*, (New Jersey, 1981), 36-41.
- Hecht, W., "Zur Geschichte der 'Kaiserin' von Montpellier, Eudoxia Komnena," *REB* 26 (1968), 161-169.
- Heller, S.G., "Fashion in French Crusade Literature: Desiring Infidel Textiles," in D. G. Koslin and J. Snyder, *Encountering Medieval Textiles and Dress. Object, Texts, Images* (New York, 2002), 103-119.

- Heller, S.G., "Limiting Yardage and Changes of Clothes. Sumptuary Legislation in Thirteenth-Century France, Languedoc and Italy," in J. Burns, ed., *Medieval Fabrications. Dress, Textiles, Clothwork, and Other Cultural Imaginings* (New York, 2004), 121-136.
- Hendy, M., "Seventeen Twelfth- and Thirteenth-Century Byzantine Hoards," *CH* VI (1981), 61-72.
- _____ "Coins," in ed. R. Harrison, *Excavations at Saraçhane in Istanbul*, vol. 1 (New Haven, 1986), 278-373.
- _____ "Roman, Byzantine and Latin Coins" in Striker C., and Kuban, D., *Kalenderhane in Istanbul. The Excavations. Final Reports on the Archaeological Exploration and Restoration at Kalenderhane Camii 1966-1978* vol. 2 (New Haven, 1997), 175-276.
- _____ "Roman, Byzantine and Latin Coins," in C. L. Striker and D. Kuban, *Kalenderhane in Istanbul. The Excavations. Final reports on the Archaeological Exploration and Restoration at Kalenderhane Camii 1966-1978*, vol. 2 (New Haven, 1997), 175-276.
- Hendy, M., and Charles, J.A. "The Production Techniques, Silver Content and Circulation History of the Twelfth Century Byzantine Trachy," *Archaeometry* 12.1 (1970), 13-21.
- Henning, F. W., *Handbuch der Wirtschafts-und Sozialgeschichte Deutschlands*, 3 vols. (Paderborn, 1991).
- Henning, J., "Germanisch-romanische Agrarkontinuität und-diskontinuität im nordalpinen Kontinentaleuropa- Teile eines Systemwandels? Beobachtungen aus archäologischer Sicht," in D. Hägermann, W. Haubrichs and J. Jarnut, eds. *Akkulturation. Probleme einer germanisch-romanischen Kultursynthese in Spätantike und frühem Mittelalter* (Berlin, 2004), 396-435.
- _____ "The Metropolis of Pliska or, How Large does an Early Settlement have to be in Order to be Called a City?" in ed. J. Henning *Post Roman Towns, Trade and Settlement in Europe and Byzantium* vol. 2 (Berlin, 2007), 209-240.

- _____ "Strong Rulers—Weak Economy? Rome, the Carolingians and the Archaeology of Slavery in the First Millenium AD," in J. R. Davis, M. McCormick, *The Long Morning of Medieval Europe. New Directions in Early Medieval Studies* (Ashgate, 2008), 33-53.
- Herrin, J., *Report on the Archaeological Significance of the Roman and Byzantine Pottery from Kalenderhane Camii, Istanbul* (London, 1972).
- _____ "Kouklia- Medieval Pottery," *Report of the Department of Antiquities, Cyprus*, (Nicosia, 1973), 199-201.
- _____ "The Byzantine and Arab Periods," in ed. D. Huxley, *Cretan Quests. British Explorers, Excavators and Historians* (Athens, 2000), 188-194.
- Herrin, J., and Toydemir, A. "Byzantine Pottery," in eds. C. Striker and D. Kuban, *Kalenderhane in Istanbul. The Excavations*, (Mainz am Rhein, 2007), 69-122.
- Heyd, U., *Histoire du commerce du Levant au Moyen Âge* (expanded edition), 2 vols. (Amsterdam, 1967).
- Hofenk de Graaff, J. H., with contributions from W. G. Th. Roelofs and Maarten R. van Bommel, *The Colorful Past. Origins, Chemistry and Identification of Natural Dyestuffs* (Gardolo, 2004).
- Hofenk de Graaff, J. H., and Roelofs, W. G. Th., "Dyestuffs along the Silk Road: Identification and Interpretation of Dyestuffs from Early Medieval Texts," in *Central Asian Textiles and their Contexts in the Early Middle Ages* (Bern, 2006), 35-48.
- Hoffman, R. C., "Economic Development and Aquatic Ecosystems in Medieval Europe," *The American Historical Review* 101. 3 (1996), 631-669.
- Houston, S., Brittenham, C., et. al. *Veiled Brightness. A History of Maya Color* (Austin, 2009).
- Hurst, J. D., *Sheep in the Cotswolds: the Medieval Wool Trade* (Stroud, 2005).
- Inalcık, H., "Bursa and the Commerce of the Levant," *JESHO* 3.2 (1960), 131-147.

- Jackson, P., "The Mongols and Europe," in D. Abulafia, ed., *The New Cambridge Medieval History* c. 1198-c. 1300 (Cambridge, 2008), vol. 5, 703-719.
- Jacoby, D., "Silk in Western Byzantium before the Fourth Crusade," in *Trade Commodities and Shipping in the Medieval Mediterranean VII* (Ashgate, 1997), 452-500.
- _____ "Silk Crosses the Mediterranean," in ed. G. Airaldi, *Le vie del Mediterraneo* (Genoa, 1997), 55-79.
- _____ "Jews and the Silk Industry of Constantinople," repr. in *Byzantium, Latin Romania and the Mediterranean XI* (Aldershot, 2001), 1-20.
- _____ "Silk Economics and Cross-Cultural Artistic Interactions: Byzantium, the Muslim World, and the Christian West," *DOP* 58 (2004), 197-240.
- _____ "Genoa, Silk Trade and Silk Manufacture in the Mediterranean Region (ca. 1100-1300)," in *idem.*, *Commercial Exchange, across the Mediterranean XI* (repr. London, 2005), 11-40.
- _____ "The Production of Silk Textiles in Latin Greece," in *idem.*, *Commercial Exchange across the Mediterranean XII* (repr. London, 2005), 22-35.
- _____ "The Economy of Latin Constantinople, 1204-1261," in A. Laiou, ed., *Urbs Capta La IVe Croisade et ses consequences* (Paris, 2005), 195-214.
- _____ "Production et commerce de l'alun oriental en Méditerranée, XIe-XVe siècles," in P. Bogard, J. P. Brun and M. Picon, eds., *L'alun de Méditerranée* (Aix-en-Provence, 2005), 219-267.
- _____ "Marco Polo, His Close Relatives, and His Travel Account: Some New Insights," *Mediterranean Historical Review* 21. 2 (2006), 193-218.
- _____ "Late Byzantium between the Mediterranean and Asia: Trade and Material Culture," in S. T. Brooks, ed., *Byzantium: Faith and Power (1261-1557). Perspectives on Late Byzantine Art and Culture* (New York, 2007), 20-41.
- _____ "The Pisan Commercial Manual of 1278 in the Mediterranean Context," in F. Cardini and M. L. Ceccarelli Lamut, eds., *Quel mar che la terra inghirlanda* (Rome, 2007), vol. 2, 449-464.

- _____. "Silk in Mediaeval Andros," in eds. E. Chrysos and E. Zachariadou, *Captain and Scholar. Papers in Memory of D. Polemis* (Andros, 2009), 137-150.
- Jaritz, G., "Kleidung und Prestige-Konkurrenz: Unterschiedliche Identitäten in der städtischen Gesellschaft unter Normierungszwängen," *Saeculum* 44 (1993), 8-31.
- Jaro, M., "Gold Embroidery and Fabrics in Europe XI-XIV Centuries," *Gold Bulletin* 23.2 (1990), 40-57.
- Japp, S., "Late Roman, Byzantine and Ottoman Pottery from Alexandria Troas," in B. Böhlendorf Arslan, H. Witte Orr, A. O. Uysal, eds., *Çanak. Late Antique and Medieval Pottery and Tiles in Mediterranean Archeological Contexts*, (Istanbul, 2007), 55-72.
- Jenkins, M., "Early Medieval Islamic Pottery: The Eleventh Century Reconsidered," *Muqarnas* 9 (1992), 56-66.
- Janko, R., "Frankish and French Coins from Ayios Stephanos, Laconia," *BSA* 77(1982), 187-189.
- Johnstone, P., "The Byzantine Pallio in the Palazzo Bianco at Genoa," *Gazette des beaux arts* 118 (March, 1976), 99-108.
- Jordanov, I., *Moneti i monetno obrushtenie v srednovekovna Bulgaria, 1081-1261* (Sofia, 1984).
- Haskins, C. H., *The Rise of Universities* (Ithaca, 1957).
- Hilsdale, C., "The Imperial Image at the End of Exile. The Byzantine Embroidered Silk in Genoa and the Treaty of Nymphaion (1261)," *DOP* 64 (2010), 151-199.
- Kaplan, M., *Les hommes et la terre à Byzance du VI^e au XI^e siècle* (Paris, 1992).
- Karpov, S.P., *L'Impero di Trebisonda Venezia Genova e Roma 1204-1461* (Rome, 1986).
- Kaye, J., *Economy and Nature in the Fourteenth Century. Money, Market Exchange, and the Emergence of Scientific Thought* (Cambridge, 1988).

- Kazhdan, A., and Epstein, A. W., *Change in Byzantine Culture in the Eleventh and Twelfth Centuries* (Berkeley, 1985).
- Kazhdan, A., "Kouropalates," in the on-line ODB.
- Killerby, C. K., *Sumptuary Law in Italy 1200-1500* (Oxford, 2002).
- King, D., "Sur la signification de Diasprum," in eds. A. Muthesius and M. King, *Collected Textile Studies IV* (repr., London, 2004), 71-76.
- _____, "Types of Silk Cloth used in England 1200-1500," in ed. S. Cavaciocchi, *La seta in Europa, secc. 13-20* (Prato, 1993), 459-463. [Repr. in eds. A. Muthesius and M. King, *Collected Textile Studies VI* (repr., London, 2004)].
- King, D., and King, M., "Silk Weavers of Lucca in 1376," in eds. I. Estham and M. Nockert, *Opera Textilia Variorum Temporum* (Stockholm, 1988), 67-76.
- Kislinger, E., "Gewerbe im späten Byzanz," *Sitzungsberichte Österreichische Akademie der Wissenschaften. Phil. Hist. Klasse* 513-514 (1988), 103-126.
- Klesse, B., *Seidenstoffe in der Italienischen Malerei des 14. Jahrhunderts* (Bern, 1967).
- Kocabaş, U., ed., *The 'Old Ships' of the 'New Gate.' Yenikapı'nın Eski Gemileri* (Istanbul, 2008).
- Kontogiannis, N., and Arvaniti, S., "The Medieval Kato Kastro of Andros. Excavation, Data and Ceramic Material," in eds. B. Böhlendorf Arslan, H. W. Orr, A. O. Uysal Çanak, *Late Antique and Medieval Pottery and Tiles in Mediterranean Archeological Contexts*, (Istanbul, 2007), 349-362.
- Köroğlu, G., "Glazed Pottery from Cyprus and the Hatay-Çukurova Region in the Mersin-Yumuktepe Excavations," in eds. B. Böhlendorf Arslan, H. W. Orr, A. O. Uysal Çanak, *Late Antique and Medieval Pottery and Tiles in Mediterranean Archeological Contexts*, (Istanbul, 2007), 441-456.
- Köroğlu, K., *5. Yılında Yumuktepe, The Fifth Anniversary of the Excavations at Yumuktepe (1993-1997)*, (Istanbul, 1998).
- Kritzas, Ch., "Το βυζαντινόν ναυάγιον Πελοποννήσου Αλοννήσου," *AAA* 4. 2 (1971) 176-185.

- Kuleff, I., Djingova R., and Djingov, G., "Provenance study of Sgraffito Ceramics (Thirteenth and Fourteenth Century) from Shumen, Varna and Tcherven, in ed. Y. Maniatis, *Archaeometry Proceedings of the 25th International Symposium* (Amsterdam, 1989), 533-542.
- Kyritzès, D., and Smyrlis, K., "Les villages du littoral Égéen de l'Asie Mineure au Moyen Âge," J. Lefort, C. Morrisson, J.-P. Sodini, eds., *Les villages dans l'Empire byzantin (IV^e- XV^e siècle)* (Paris, 2005), 437-451.
- Lachaud, F., "Les soieries importées en Angleterre (fin XIIe et XIII e siècles)," *Techniques et culture* 34 (1994), 179-192.
- Laiou, A. E., *Peasant Society in the Late Byzantine Empire. A Social and Demographic Study* (Princeton, 1978).
- Laiou A. E. and Morrisson, C., *The Byzantine Economy* (Cambridge, 2007).
- Laiou-Thomadakis, A. E., "The Byzantine Economy in the Mediterranean Trade System; Thirteenth-Fifteenth Centuries," *DOP* 34/35 (1980/1981), 177-222.
- Laiou, A. E., "Contribution à l'étude de l'institution familiale en Épire au XIII^{ème} siècle," in *eadem*, *Gender, Society and Economic Life in Byzantium V* (Hampshire, U.K., repr. 1992), 275-323.
- _____ "Use and Circulation of Coins in the Despotate of Epiros," *DOP* 55 (2001), 207-215.
- _____ "Exchange and Trade. Seventh- Twelfth Centuries," in *EHB* 2, 697-770.
- _____ "Monopoly and Privileged Free Trade in the Eastern Mediterranean (8th- 14th Centuries)," in eds. D. Coulon, C. Otten-Froux, P. Pagès and D. Valérian, *Chemins d'Outre-Mer. Études d'histoire sur la Méditerranée médiévale offertes à Michel Balard* (Paris, 2004), 512-526.
- Lane, A., "The Early Sgraffito Wares of the Near East," *Transactions of the Oriental Ceramic Society* 15 (1937-38), 33-54.
- _____ "Medieval Finds at Al Mina in North Syria," *Archaeologia* 87 (1938), 19-78.

- Lane, G. S., "Word for Clothing in the Principal Indo-European Languages," *Language* 7.3 (1931), 3-44.
- Langdon, J. S., *Byzantium's Last Imperial Offensive in Asia Minor* (New Rochelle, 1992).
- Langdon, J., "Horse Hauling: A Revolution in Vehicle Transport in 12th-13th -Century England?" *Past and Present* 103 (1984), 37-66.
- Langdon J., and Masschaele, J., "Commercial Activity and Population Growth in Medieval England," *Past and Present* 190. 1 (2006), 35-81.
- Laporte, J.-P. , *Le Trésor des saints de Chelles* (Chelles, 1988).
- Laurent, V., "Le sébastocrator Constantine Ange et le péplum du Musée de Saint-Marc à Venise," *REB* 18 (1960), 208-213.
- Laws, B., *Fifty Plants that Changed the Course of History* (Buffalo, 2010).
- Lazzarini L., and Canal, E., "Ritrovamenti di ceramica bizantina ne'Laguna e la nascita del graffito veneziano," *Faenza* 69 (1983), 19-43.
- Lazzarini L., and Calogero, S., "Early Local and Imported Byzantine Sgraffito Ware in Venice: A Characterization and Provenance Study," in *Archaeometry Proceedings of the 25th International Symposium*, Y. Maniatis, ed. (Amsterdam, 1989), 571-584.
- Lefort, J., "Population et peuplement en Macédoine orientale IXe- XIVe siècle," repr. in *idem., Société rurale et histoire du paysage à Byzance* (Paris, 2006), 230-247.
- Leloir, M., *Dictionnaire du costume et ses accessoires, des armes et des étoffes, des origines à nos jours*. (Paris, 1951).
- Lemerle, P., *Cinq études sur le XIe siècle byzantin* (Paris, 1977).
- _____. *The Agrarian History of Byzantium. From the Origins to the Twelfth Century* (Galway, 1979).
- Leonard, R., "The Effects of the Fourth Crusade on European Gold Coinage," in ed. T. Madden, *The Fourth Crusade: Event, Aftermath, and Perceptions* (Aldershot, 2008), 75-85.

- Lev, R., "Tinnis: An Industrial Medieval Town," in *L'Egypte Fatimide. Son art et son histoire* (Paris, 1999), 83-96.
- Lightfoot, C., "The Amorium Project: The 1996 Excavation Season," *DOP* 52 (1998), 323-336.
- _____, "Byzantine Anatolia: Reassessing the Numismatic Evidence," *RN* 158 (2002), 229-239.
- Lightfoot C., and Ivison, E., "Introduction," in ed. M.A.V. Gill, *Amorium Reports, Finds I: The Glass (1987-1997)*, (London, 2002), 1-31.
- Lightfoot, C., Koçyiğit, O., Yaman, H., "Amorium Kazısı 2005," *KST* 28. 1. (2006), 271-294.
- Lohrmann, D., "Le moulin à eau dans le cadre de l'économie rurale de la Neustrie (VIIe-IXe siècles), *La Neustrie* 16/1 (Sigmaringen, 1989), 367-404.
- Lopez, R. S., *The Commercial Revolution of the Middle Ages 950-1350* (Cambridge, 1976).
- Loveluck, C. and Walton Rogers, P., "Craft and Technology-Non-Agrarian Activities Underpinning Everyday Life," in eds., C. Loveluck, et. al., *Rural Settlement, Lifestyles and Social Change in the Later First Millennium AD: Anglo-Saxon Flixborough in its Wider Context* (Oxford, 2007), 99-111.
- Lowick, N. M., Bendall, S., and Whitting, P. D., *The Mardin Hoard* (Ringwood, 1977).
- Lowry, H., *Ottoman Bursa in Travel Accounts* (Bloomington, 2003).
- Lucas, A. R., "Industrial Milling in the Ancient and Medieval Worlds. A Survey of the Evidence for an Industrial Revolution in Medieval Europe," *Technology and Culture* 46. 1 (2005), 1-30.
- Lushchenko, M., "L'image de l'Asie Mineure et des Turcs dans les textes narratifs du Moyen Âge Français (XIIe-milieu du Xve siècle)," unpublished Ph.D. dissertation, University of British Columbia (April, 2011).
- Maguire, H., "'Feathers Signify Power:' The Iconography of Byzantine Ceramics from Serres," in *Διεθνές Συνέδριο. Οι Σερρες και η Περιοχή τους απο την*

Αρχαία στη Μεταβυζαντινή Κοινωνία, vol. 2 (Thessalonike, 1998), 383-398.

Maier, F. G., and. von Wartburg, M. L., "Ausgrabungen in Alt-Paphos," *Archäologischer Anzeiger* (1998) Heft 1, 105-132.

Malanima, P., *I piedi di legno. Una macchina alle origini dell'industria medievale* (Milan, 1988).

Mangieri, G.L., *Tornesi, Gigliati e Pirreali in un tesoretto rinvenuto a Muro Leccese* (Spoleto, 2010).

Maniatis, G. C., "Organization, Market Structure, and Modus Operandi of the Private Silk Industry in Tenth-Century Byzantium," *DOP* 53 (1999), 263-332.

_____ "The Domain of Private Guilds in the Byzantine Economy, Tenth to Fifteenth Centuries," *DOP* 55 (2001), 339-369.

_____ "Organization and Modus Operandi of the Byzantine Salt Monopoly," *BZ* 102.2 (2009), 661-696.

Manoussacas, M., "Le terminus ante quem pour la composition du roman Libistros et Rhodamne," *JÖB* 44 (1994), 298-306.

Mannoni, T., *La Ceramica medievale a Genova e nella Liguria. Studi Genuensi* 7 (1968-1969), (Genoa, 1975).

Mannsperger, D., "Vom Zahlungsmittel zum Leitartefakt- Münzen und Münzfunde in Ilion," in ed. M. Korfmann, *Troia. Archäologie eines Siedlungshügels und seiner Landschaft* (Mainz am Rhein, 2006), 265-274.

Margaritis, E., Jones, M. , Martin, K., "Greek and Roman Agriculture," J. P. Oleson, ed., *The Oxford Handbook of Engineering and Technology in the Classical World* (Oxford, 2008), 158-174.

Martin, Jean-Marie. *La Pouille du VIe au XIIe siècle*. École Française de Rome no. 179 (Paris, 1993).

Martin, Jean-Marie. "Economia naturale ed economia monetaria nell'Italia meridionale longobarda e bizantina (secoli VI-XI)" in eds. Romano R. and Tucci, U.

Storia d'Italia Annali 6. Economia naturale, economia monetaria (Torino, 1983), 178-219.

Martin, "Monete d'argento nell'Italia meridionale del secolo XII secondo i documenti archivio," *Bolletino di Numismatica* 6-7 (1986), 85-97.

Martinez, A. P., "Institutional Development, Revenues and Trade," in N. di Cosmo, A. J. Frank, P. Golden, eds., *The Cambridge History of Inner Asia. The Chinggisid Age* (Cambridge, 2009), 89-108.

Martiniani-Reber, M., ed. *Parure d'une princesse byzantine - tissus archéologiques de Sainte-Sophie de Mistra* (Genève, 2000).

——— "Stoffe tardoantiche e medioevali nel Tesoro di Sant' Ambrogio" in ed. C. Berteli, *Milano. Una capitale da Ambrogio ai Carolingi* (Milan, 1987), 178-201.

Mason, R. B., and Mundell-Mango, M., "Glazed 'Tiles of Nicomedia' in Bithynia, in Constantinople and Elsewhere," in eds. C. Mango and G. Dagron, *Constantinople and Its Hinterland* (Oxford, 1995), 313- 331.

Matschke, K. P., "Tuchproduktion und Tuchproduzenten in Thessalonike und in anderen Städten und Regionen der späten Byzanz," *Byzantiaka* 9 (1989), 49-87.

Mattingly, H., "A Hoard of Thirteenth-Century Coins at Arta in Epirus," *NC* 5. 3. (1923), 32-46.

Mavroudi, M. V., *A Byzantine Book on Dream Interpretation: the Oneirocriticon of Achmet and its Arabic Sources* (Leiden, 2002).

May, F. L., *Silk Textiles of Spain* (New York, 1957).

Mazzaoui, *The Italian Cotton Industry in the Later Middle Ages 1100-1600* (Cambridge, 1981).

Mazzucato, O., *La ceramica laziale dei secoli XI-XIII* (Rome, 1976).

McCormick, M., *Origins of the European Economy. Communications and Commerce A.D. 300-900* (Cambridge, 2001).

- _____ "Byzantium's Role in the Formation of Early Medieval Civilization: Approaches and Problems," *Illinois Classical Studies* 12 (1987), 207-220.
- _____ "Bateaux de vie, bateaux de mort: Maladie, commerce, transports annonaires et le passage economique du Bas-Empire au Moyen Age," *Morfologie sociali e culturali in Europa fra tarda antichitd e alto medioevo*, *Settimane*, 45 (1996), 37-40.
- _____ "Volcanoes and the Climate Forcing of Carolingian Europe, A.D. 750 to 950," (with Paul Dutton, Paul Mayewski, and Nick Patterson) *Speculum* 82 (2007), 865-895.
- _____ "From One Center of Power to Another: Comparing Byzantine and Carolingian Ambassadors," in *Deutsche Königspfalzen. Beiträge zu ihrer historischen und archäologischen Erforschung* 8 (Göttingen, 2007), 45-72.
- _____ "Discovering the Early Medieval Economy," in J. R. Davis and M. McCormick, *The Long Morning of Europe. New Directions in Medieval Studies* (Aldershot, 2008), 13-18.
- _____ "Getting to Markets, Information, Shipwrecks and Exchange 300-1000," presented at the BSANA Conference, November, 2009.
- McCormick, M. Büntgen, U., Cane, M.A., Cook, E. R., Harper, K., Huybers, P., Litt, T., Manning, S. W., Mayewski, P. A., More, A. F. M., Nicolussi, K., Tegel, W., "Climate Change during and after the Roman Empire: Reconstructing the Past from Scientific and Historical Evidence," *Journal of Interdisciplinary History*, 43. 2 (2012), 169-220.
- McGrail, S., *Boats of the World. From the Stone Age to Medieval Times* (Oxford, 2001).
- Megaw, A., *Kourion Excavations in the Episcopal Precinct* (Washington D. C., 2007).
- _____ "Glazed bowls in Churches," *Δέλιον της Χριστιανικής Αρχαιολογικής Εταιρίας* 4 (1964), 145-162.
- _____ "Zeuxippus Ware," *BSA* 63 (1968), 67-88.

- _____ "Supplementary Excavations on a Castle Site at Paphos," *DOP* 26 (1972), 322-343.
- _____ "Zeuxippus Ware Again," *Recherches sur la céramique byzantine*, BCH supplement XVIII (Paris, 1989), 259-276.
- _____ "An Early Thirteenth-Century Aegean Glazed Ware," in G. Robertson and G. Henderson, eds. *Studies in Memory of David Talbot Rice* (Edinburgh, 1975), 34-46.
- Metcalf, D., M., *Coinage of the Crusades and the Latin East* (London, 1995).
- Metcalf, D. M., "The Brauron Hoard and the Petty Currency of Central Greece 1143-1204," *NC* 7.4 (1964), 251-259.
- _____ "Neatly Clipped Trachea and the Question of Byzantine Monetary Expedients in the Late Twelfth Century," *NCirc* 81 (1973), 370-371.
- _____ "Byzantinobulgarica: the Second Bulgarian Empire and the Problem of the 'Bulgarian Imitative' Trachea before and after 1204," *NCirc* 81.11 (1973), 418-421.
- _____ "Silver and Tin in the Byzantine Trachy Coinages ca. 1160-1261," *Revue belge de numismatique* 123 (1977), 107-131.
- _____ "The Istanbul Hoard of 1946 and the Date of the Neatly Clipped Trachea," *NCirc* 83 (1975), 330-335.
- _____ "The Value of the Amorgos and Thira Hoards as a Test Case for the Interpretation of Sub-Byzantine Trachea in the Years around 1204," *Nomismatika Chronika* 8 (1989), 49-59.
- _____ "Three Hoards of Deniers Tournois from Frankish Greece," *Quaderni Ticinesi di Numismatica e Antichita Classiche* (1995), 351-362.
- Metcalf, D. M., and O'Hara, M. D., "A Hoard of Trachea from the Reign of Theodore I of Nicaea, 1204-1222," *NCirc* 85 (1977), 103-106.
- Mercangöz, Z., "Kuşadası Kadı Kalesi 2001 Yılı Çalışmaları," *KST* 24. 2 (2002), 126-127.

- _____ "Emporion ve Kommerkion Olarak Anaia'nın Değişken Tarihsel Yazgısı," in eds. A. Ödekan, E. Akyürek and N. Necipoğlu, *Change in the Byzantine World in the Twelfth and Thirteenth Centuries* (Istanbul, 2010), 277-292.
- Mercangöz, Z., et. al., "Kuşadası Kadikalesi Kazısı 2006 Yılı Çalışmaları," *KST* 29.3 (2007), 449-470.
- Michailidou, M., "Ceramica veneziana dalla città medievale di Rodi (1309-1522)," in ed. S. Gelichi, *La Ceramica nel mondo bizantino tra XI e XV secolo e suoi rapporti con l'Italia. Atti del seminario (Siena), 11-13 marzo 1991* (Florence, 1993), 333-340.
- Miller, S., ed., *Excavations at Nemea. The Coins* vol. 3, (Berkeley, 2005).
- Miller, W., *Trebizond. The Last Greek Empire* (Amsterdam, 1968).
- Milne, J.G., "J. T. Wood's Coins from Ephesos," *NC* 19-20 (1925), 385-391.
- Mitchell, S., *Aşvan Kale Keban Rescue Excavations, Eastern Anatolia* (Oxford, 1980).
- Mitsiou, E., "Ideology and Economy in the Politics of John III Vatatzes (1221-1254)," in eds. A. Ödekan, E. Akyürek and N. Necipoğlu, *Change in the Byzantine World in the Twelfth and Thirteenth Centuries* (Istanbul, 2010), 195-205.
- Molà, L., *The Silk Industry of Renaissance Venice* (Baltimore, 2000).
- Molmenti, P., trans. H. F. Brown, *Venice: its Individual Growth from the Earliest Beginnings to the Fall of the Republic*, (Chicago, 1906).
- Monnas, L., *Merchants Princes and Painters. Silk Fabrics in Italian and Northern Paintings 1300-1550* (New Haven, 2008).
- _____ "The Price of Camacas Purchased for the English Court during the Fourteenth Century," ed. S. Cavaciocchi, *La seta in Europa, secc. 13-20* (Prato, 1993), 741-753.
- _____ "Dress and Textiles in the St Louis Altarpiece: a New Light on Simone Martini's Working Practice," *Apollo* 373 (1993), 167-174.

- Morgan, C., *Corinth Results of Excavations Conducted by the American School of Classical Studies at Athens. vol. 11 The Byzantine Pottery* (Cambridge Mass. 1942).
- Morrisson, C., "Byzantine Money: its Production and Circulation," in *EHB* 3, 909-966.
- _____ "Thirteenth-Century Byzantine 'Metallic' Identities," in J. Herrin and G. Saint-Guillain, eds., *Identities and Allegiances in the Eastern Mediterranean after 1204* (London, 2011), 133-164.
- Morrisson, C., Brenot, C., Barrandon, J-N, Callu, J-P, Poirier J., and Halleux, R. *L'Or Monnayé I Purification et alterations de Rome à Byzance* (Paris, 1985).
- Morrisson, C., Barrandon, J-N, and Bendall, S. "Proton Activation and XRF Analysis: an Application to the Study of the Alloy of Nicaean and Palaeologan Hyperpyra Issues," in *Metallurgy in Numismatics*, vol 2 ed. W. A. Oddy (London, 1988), 23-39.
- Morrisson C., and Cheynet, J.C., "Prices and Wages in the Byzantine World," in *EHB* 2, 815-878.
- Morrisson, C., Blet-Lemarquand, M., "Le métal des chrysobulles (XI^e-XII^e siècle)," *RN* 164 (2008), 151-167.
- Mott, L. V., *The Development of the Rudder. A Technological Tale* (London, 1997).
- Müller-Wiener, W., "Das Theaterkastell von Millet," *IstMitt* 17 (1967), 279-290.
- _____ "Millet 1983-84," *IstMitt* 35 (1985), 13-139.
- Munro, J., "The Medieval Scarlet and the Economics of Sartorial Splendour," in eds. N.B. Harte and K.G. Ponting, *Cloth and Clothing in Medieval Europe* (London, 1983), 13-70.
- Muthesius, A., *Byzantine Silk Weaving AD 400 to AD 1200* (Vienna, 1997).
- _____ "Archbishop Hubert Walter's Tomb and its Furnishings," in *Medieval Art and Architecture at Canterbury before 1220* (Leeds, 1982), 71-89.
- _____ "Byzantine Influences Along the Silk Route: Central Asian Silks Transformed," in *Contact, Crossover, Continuity. Proceedings of the Fourth*

Biennial Symposium of the Textile Society of America, Inc., (Los Angeles, 1995),

_____ "Courtly and Aristocratic Silk Patronage," in *eadem.*, *Studies in Silk in Byzantium* (London, 2004), 85-108.

_____ "Silk in the Medieval World," in ed. D. Jenkins, *The Cambridge History of Western Textiles* (Cambridge, 2003), 325-354.

_____ "Textiles and Dress in Byzantium," M. Grünbart, E. Kislinger, A. Muthesius and D. Stathakopoulos, eds., *Material Culture and Well-Being in Byzantium (400-1453)* (Vienna, 2007), 159-169.

Muzzarelli, M., "Reconciling the Privilege of a Few with the Common Good: Sumptuary Laws in Medieval and Early Modern Europe," *Journal of Medieval and Early Modern Studies* 39:3 (2009), 597-612.

_____ "Le leggi suntuariae," *Storia d'Italia: Annali*, vol. 19, *La moda* (Torino, 2003), 185-220.

Najemy, J. M., *A History of Florence 1200-1575* (Malden, 2006).

Nam, J.-K., *Le commerce du coton en Méditerranée à la fin du Moyen Âge* (Leiden, 2007).

Nicolaou-Konnari A., Schabel, C., eds., *Cyprus. Society and Culture 1191-1374* (Leiden, 2005).

North, M., *Europa Expandiert 1250-1500* (Stuttgart, 2007).

Nunn, V., "The Encheirion as Adjunct to the Icon in the Middle Byzantine Period," *BMGS* 10 (1986), 73-102.

Oberlander-Tarnôveau, E., "Les hyperpères de type Jean Vatatzes III-Classification, chronologie et l'évolution du titre (à la lumière du trésor d'Uzun Bair), *Istro-Pontica* (2000), 499-561.

Ogilvie, C., Cerman, M., *European proto-industrialization* (Cambridge, 1996).

Oikonomides, N., *Fiscalité et exemption à Byzance (9-11. siècles)*, (Athens, 1996).

- _____ "The Contents of the Byzantine House from the Eleventh to the Fifteenth Century," *DOP* 44 (1990), 205-214.
- _____ "La décomposition de l'empire byzantin à la veille de 1204 et les origines de l'empire de Nicée: à propos de la *Partitio Romaniae*," in *idem.*, *Byzantium from the Ninth Century to the Fourth Crusade* (repr. London, 1992), 3-28.
- _____ "Silk Trade and Production in Byzantium from the Sixth to the Ninth Century: the Seals of Kommerkiarioi," E. Zachariadou, ed., *Social and Economic Life in Byzantium* (repr. London, 2001), 33-53.
- Oikonomidou, A., Touratsoglou, Io., Tsourte-Koule, E., Krikou-Galane, M., "Ο θησαυρος Κομοτήνης 1979· Συμβολή στην Κυκλοφορία των Τετάρτερων του ΙΒ' αι. Μ. Χ.," *BF* 14.1 (1989), 365-428.
- Oikonomidou-Karamesine, M., "Τρεῖς Θησαυροὶ τοῦ 13οῦ αἰῶνα τοῦ Ν.Μ.Α.," *Byzantina* 13 B (1985), 983-1002.
- _____ "Athenai 1974," *AD* 29 B1 *Chronika* (1973-1974), 13-14.
- Oikonomou-Laniado, A., "La céramique protomajolique d'Argos," in ed. S. Gelichi, *La ceramica nel mondo bizantino tra 11e 15 secolo e i suoi rapporti con l'Italia* (Florence, 1993), 307-316.
- Okçu, R., *Bursa Arkeoloji Müzesi Sikke Teşhir Kataloğu* (Bursa, 2004).
- Ostrogorsky, G., *Pour l'histoire de la féodalité byzantine*, trans. H. Grégoire (Brussels, 1954).
- Otten-Froux, C., "Les Pisans en Égypte et à Acre dans le seconde moitié du XIII^e siècle: documents nouveaux," *Bollettino Storico Pisano* 52 (1983), 163-190.
- _____ "Documents inédits sur les Pisans en Roumanie aux XIII^e – XIV^e siècles," in M. Balard, A. Laiou, C. Otten-Froux, eds., *Les Italiens à Byzance. Édition et présentation de documents* (Paris, 1987), 153-191.
- Ötüken, Y., "Demre'deki Çalışmalarda Ele Geçen Küçük Buluntular," in 1992 Yılı *Anadolu Medeniyetleri Müzesi Konferansları Anadolu Medeniyetleri Müzesi* (Ankara, 1993), 102-117.

- _____ "Likya Ortaçağ Araştırmaları ve Demre Aziz Nikolas Kilisesi Kazısı," *Adalya* 1 (1996), 73-85.
- _____ "Demre Aziz Nikolaos Kilisesi Kazısının Ortaçağ Araştırmalarına Katkıları," *Sanat Tarihi Dergisi* 9 (1998), 85-102.
- _____ "2004 Yılı Aziz Nikolaos Kilisesi Kazısı ve Duvar Resimlerini Belgeleme, Koruma-Onarım Çalışmaları," *KST* 27.1 (2005), 297-312.
- Owen-Hughes, D., "Sumptuary Law and Social Relations in the West," in J. Bossy, ed., *Disputes and Settlements: Law and Human Relations in the West* (Cambridge, 1983), 69-99.
- Öz, T., *Turkish Textiles and Velvets* (Ankara, 1950).
- Özeren, Ö. , Hançer, K., Ünal, F., "Bursa-Bizans ve Osmanlı Yapı Kompleksi Kazısı 2000" in *12. Müze Çalışmaları ve Kurtarma Sempozyumu Kuşadası 2001* (Ankara, 2002), 149-156.
- Papadopoulou, B., and Tsouris, K., "Late Byzantine Ceramics from Arta: Some Examples," in ed. S. Gelichi, *La Ceramica nel mondo bizantino tra XI e XV secolo e suoi rapporti con l'Italia. Atti del seminario* (Florence, 1993), 241-261.
- Papadopoulou, P., "De l'unité à l'éclatement: la monnaie et son usage dans le monde byzantin (1092-1261)," 3 vols., Unpublished Ph. D. Dissertation (Université Paris I, 2007).
- Parani, M., *Reconstructing the Reality of Images. Byzantine Material Culture and Religious Iconography (11th-15th centuries)*, (Leiden, 2003).
- _____ "Intercultural Exchange in the Field of Material Culture in the Eastern Mediterranean: The Evidence of Byzantine Legal Documents (11th to 15th Centuries)," A. D. Beihammer, M.G. Parani, C.D. Schabel, eds., *Diplomatics in the Eastern Mediterranean 1000-1500* (Leiden, 2008), 348-372.
- _____ "Byzantine Jewellery: The Evidence from Byzantine Legal Documents," in C. Entwistle and N. Adams, eds., *Intelligible Beauty. Research on Byzantine Jewellery* (Oxford, 2010), 186-192.

- Parani, M., Pitarakis, B., Spieser, J.-M., "Un exemple d'inventaire d'objets liturgiques. Le testament d'Eusthatios Boilas (Avril 1059)," *REB* (2003), 143-165.
- Papanikola-Bakirtzi, D., "Byzantine Glazed Ceramics on the Market. An Approach," in C. Morrisson, ed., *Trade and Markets in Byzantium* (Washington D.C., 2012), 193-216. (For the other works by this author, see under Bakirtzis, D.).
- Parman, E., "Eskişehir-Karacahisar Kalesi 2001 Yılı Kazı Çalışmaları," *KST* 24.2 (2002), 69-80.
- _____ "The Pottery from St John's Basilica at Ephesos," in V. Déroche and J.-M. Spieser, *Recherches sur la céramique byzantine*, (Paris, 1979), 275-289.
- _____ "Edirne Arkeoloji Müzesinde Bulunan Enez 1990 Yılı Bizans Seramikleri," *Anadolu Araştırmaları* 14 (1996), 391-414.
- Parure d'une princesse byzantine - tissus archéologiques de Sainte-Sophie de Mistra* (Genève, 2000).
- Pasinli, A., "Pittakia ve Magnum Palatium- Büyük Saray Bölgesinde Yapılan 2000 Yılı Kazı Çalışmaları," *13. Müze Çalışmaları ve Kurtarrma Kazıları Sempozyumu* (Denizli, 2001), 1-22.
- _____ "Pittakia ve Magnum Palatium- Büyük Saray Bölgesinde Yapılan 2001 Yılı Kazı Çalışmaları" *14. Müze Çalışmaları ve Kurtarrma Kazıları Sempozyumu* (Ankara, 2003) 1-16.
- Patitucci Uggeri, S., *La ceramica medievale pugliese alla luce degli scavi di Mesagne* (Mesagne, 1977).
- _____ "La Proto-maiolica del Mediterraneo Orientale in rapporto ai centri di produzione italiani," in *Corso di cultura sull'arte ravennate e bizantina* 32 (1985), 337-401.
- Patterson, H., and Whitehouse, D. in "The Medieval Domestic Pottery," in D'Andria, F. and Whitehouse, D., eds. *Excavations at Otranto II* (Lecce, 1992), 87-195.
- Penna, V., "Βυζαντινό νόμισμα και Λατινικές απομιμήσεις," in *Τεχνογνωσία στη Λατινοκρατούμενη Ελλάδα* (Athens, 2000), 7-21.

- Persson, K. G., *An Economic History of Europe. Knowledge, Institutions and Growth, 600 to the Present* (Cambridge, 2010).
- Peschlow, U., "Byzantinische Keramik aus Istanbul. Ein Fundkomplex bei der Irenenkirche," *IstMitt* 27/28 1977/1978 teil I, 361-414.
- Picon, M., "La préparation de l'alun à partir de l'alunite aux époques antique et médiéval," in *Arts du feu et productions artisanales: XXe Rencontres internationales d'archéologie et d'histoire d'Antibes: actes des rencontres, 21-22-23 Octobre 1999*, ed. P. Pétrequin, et. al., (Antibes, 2000), 520-530.
- Piltz, E., *Trois sakkoi byzantins. Analyse iconographique* (Stockholm, 1976).
- Ponting, M., Evans J.A., and Pashley, V., "Fingerprinting of Roman Mints Using Laserablation MC-ICP-MS Lead Isotope Analysis," *Archaeometry* 45.4 (2003), 591-597.
- Popovic, M., *The Fortress of Ras* (Belgrade, 1999).
- Postan, M., "The Trade of Medieval Europe," in M.M. Postan, E. Miller and C. Postan, eds., *The Cambridge Economic History of Europe. Trade and Industry in the Middle Ages*, vol. 2 (Cambridge, 1987), 168-305.
- Poulou-Papadimitriou, N., "Μεσοβυζαντινή κεραμική απο την Κρήτη 9ον 12ον Αιώνα," in Ch. Bakirtzis, ed., *Congrès international sur la céramique médiévale en Méditerranée* (Athens, 2003), 211-226.
- Powicke, E., and Emden, A. B., eds., *The Universities of Europe in the Middle Ages*, 3 vols. (Oxford, 1936; repr., 1987).
- Pringle, D., "Medieval Pottery from Caesarea: the Crusader Period," *Levant* 17 (1985), 171-202.
- Prinzing, G., "Der Brief Kaiser Heinrichs von Konstantinopel vom 13. Januar 1212. Überlieferungsgeschichte, Neuedition und Kommentar," *Byzantion* 43 (1973), 395-431.
- Pryor, J., "From Dromon to Galea: Mediterranean Bireme Galleys AD 500-1300," in R. Gardiner, J. Morrison, eds., *The Age of the Galley. Mediterranean Oared Vessels since Pre-Classical Times* (London, 1995), 101—116.

- Pryor, J., and Bellabarba, S., "Medieval Muslim Ships of the Pisan Bacini," *The Mariner's Mirror* 76 (1990), 99-118.
- Pulak, C., "1984 Yılı Aydın Muğla ve Antalya Illeri Sualtı Araştırmaları," *AST* 3 (1985), 35-45.
- _____ "1986 Yılı Sualtı Araştırmaları," *AST* 5 (1987), 277-285.
- _____ "1996 Yılı Sualtı Araştırması," *AST* 15 (1997), 307-322.
- Racine, P., "Le marché Génois de la soie en 1288," *Revue des études sud-est européennes* 8. 3 (1970), 403-417.
- Rackham, B., *Guide to Italian Maiolica*, (London, 1933).
- Raccagni, G., *The Lombard League 1167-1225* (London, 2010).
- Redford, S., *The Archaeology of the Frontier in the Medieval Near East: Excavations at Gritille, Turkey*, Archaeological Institute of America, Monographs, New Series 3 (Philadelphia, 1998).
- _____ "Port Saint Symeon Seramiği Denilen Hatay ve Çukurova Bölgesi Sgraffito Seramiği," in V. Ortaçağ Türk Dönemi Kazı ve Araştırmaları Sempozyumu (Ankara, 2001), 485-490.
- _____ "On Saqis and Ceramics: Systems of Representation in the Northeast Mediterranean," in eds. D.H. Weiss and L. Mahoney, *France and the Holy Land. Frankish Culture at the End of the Crusades* (Baltimore and London, 2004), 282-312.
- _____ "City Building in Seljuq Rum," in C. Lange and S. Mecit, eds., *The Seljuks. Politics, Society and Culture* (Edinburgh, 2011), 256-276.
- Redford, S., Ikram, S., Parr, E., Beach, T., "Excavations at Medieval Kinet, Turkey: a Preliminary Report," *ANES* 38 (2001), 59-138.
- Regling, K., *Die Münzen von Priene* (Berlin, 1927).

- Reist-Eicher, R. Windler, "Mit den Füßen weben," *Kunst+Architektur in Schweiz* 57 (2006), 29-35.
- Reynolds, R. L., "The Market for Northern Textiles in Genoa 1179-1200," *Révue belge de philologie et d'histoire* 8. 3 (1929), 831-851.
- Reynolds, T. S., *Stronger than a Hundred Men. A History of the Vertical Water Wheel* (Baltimore, 1983).
- Robbert, L. B. "The Reorganization of the Venetian Coinage by Doge Enrico Dandolo," *Speculum* 49. 1 (1974), 48-60.
- Rosser, J., "Stratigraphic Evidence for the Chronology of Saranda Kolones Castle (Cyprus)," in B. Böhlendorf Arslan, H. Witte Orr, A. O. Uysal, eds., *Çanak. Late Antique and Medieval Pottery and Tiles in Mediterranean Archeological Contexts*, (Istanbul, 2007), 411-418.
- Rothwell, W., "From Latin to Anglo-French and Middle English: The Role of the Multilingual Gloss," *The Modern Language Review* 88. 3 (1993), 581-599.
- Royal, J., "Beyond the Shallows: Shipwreck Discoveries from the 2005 Bozburun Peninsula Survey, Turkey," *INA Quarterly* 33. 3 (2006), 3-11.
- Rüegg, W., *Geschichte der Universität in Europa*, 4 vols. (Munich, 1993).
- Sabuncu-Toydemir, A., "Çukurova, Osmaniye İli, Ceyhan Nehri Yakınında, Aslantaş Baraj Suları Altında Kalmış olan Haçlı Kalesi Kumkale'nin Seramik Buluntuları," in ed. Ch. Bakirtzis, *Congrès international sur la céramique médiévale en Méditerranée* (Athens, 2003), 253-238.
- Saccardo, F., "Contesti medievali nella Laguna e prime produzioni graffite veneziane," in S. Gelichi, ed., *La Ceramica nel mondo bizantino tra 11e 15 secolo e i suoi rapporti con l'Italia* (Florence, 1993), 201-236.
- Saccocci, A., "Le monete negli scavi archeologici medievali delle Venezie" in B. M. Scarfi, ed., *Studi di archaeologia della X regio* (Rome, 1994), 527-535.
- _____, "Il Quartorolo," in A. Saccocci, ed., *Inspetto Nummo* (Padova, 2001), 147-164.

- _____ "Moneta e circolazione monetaria nei domini di Ezzelino," in eds. C. Bertelli and G. Marcadella, *Ezzelini. Signori della Marca nel cuore dell'Impero di Federico II* (Milan, 2001), 43-47.
- _____ "Circolazione locale ed esportazione monete di area Veneta," in *Circulation monétaire régionale et supra-régionale; Actes du troisième colloque international du Groupe Suisse pour l'étude des trouvailles monétaire* (Bern, 2002), 79-94.
- _____ "Rinvenimenti monetali di epoca medioevale nelle Venezie," in *idem., Contributi di storia monetaria delle regioni adriatiche settentrionali (Secoli X-XV)* (Padova, 2004), 197-207.
- Şahin, F., "Iznik Kuşlu Seramikleri," *Ark Sanat* 78 (1997), 25-27.
- Salamon, M., Coppa, A., McCormick, M., Rubini, M., Vargu, R., Tuross, N., "The Consilience of Historical and Isotopic Approaches in Reconstructing the Medieval Mediterranean Diet," *Journal of Archaeological Science*, 35. 6 (2008), 1667-1672.
- Sanders, G.D.R., "Excavations at Sparta: the Roman Stoa, 1988-91. Preliminary Report Part 1. Medieval Pottery," *BSA* 88 (1993), 251-86.
- _____ "New Relative and Absolute Chronologies for 9th to 13th Century Glazed Wares at Corinth: Methodology and Social Conclusions," in K. Belke, F. Hild, J. Koder, P. Soustal, eds., *Byzanz als Raum. Zu Methoden und Inhalten der historischen Geographie des östlichen Mittelmeerraumes* (Vienna, 2000), 153-173.
- _____ "Byzantine Polychrome Pottery," in *Mosaic. Festschrift for AHS Megaw J. Herrin, M. Mullett and C. Otten-Froux*, eds. British School at Athens Studies 8 (London, 2001), 89-103.
- Sarah, G., Gratuze B., and Barrandon, J.N., "Application of Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICP-MS) for the Investigation of Ancient Silver Coins," *Journal of Analytical Atomic Spectrometry* 22 (2007), 1163-1167.

- Sarah, G., Bompaire, M., McCormick, M., Rovelli, A., Guernot, C., "Analyses élémentaires de monnaies de Charlemagne et Louis le Pieux du Cabinet de Médailles: L'Italie carolingienne et Venise," *RN 164* (2008), 355-406.
- Satolli, A., ed., *La Ceramica orvietana del Medioevo* (Florence, 1983).
- Savvides, A., *Byzantium in the Near East: its Relations with the Seljuk Sultanate of Rum in Asia Minor, the Armenians of Cilicia and the Mongols A.D. c. 1192-1237* (Thessalonike, 1981).
- Schmedding, B., *Mittelalterliche Textilien in Kirchen und Klöstern der Schweiz, Katalog* (Bern, 1978).
- Schmieder, F., "The World of Codex Cumanicus, The Codex Cumanicus in its World," in F. Schmieder and P. Schreiner, eds., *Il Codice Cumanico e il suo mondo: atti del colloquio internazionale* (Rome, 2005), xiii-xix.
- Schneider, J., "Penguins and Peacocks: the Political Economy of European Cloth and Colors," *American Ethnologist* (1978), 5.3, 413-447.
- Schreiner, P., "Zur Geschichte Philadelphias im 14. Jahrhundert (1293-1390)," *Orientalia Christiana Periodica* 35.2 (1969), 375-431.
- Scott, J. A. and Kamilli, D., "Late Byzantine Pottery from Sardis" in *Actes du XVe Congrès International d'études byzantines* (Athens, 1981), 679-696.
- Shawcross, T., *The Chronicle of Morea. Historiography in Crusader Greece* (Oxford, 2009).
- _____, "Identities and Allegiances in the Eastern Mediterranean after 1204," in J. Herrin and G. Saint-Guillain, eds., *Identities and Allegiances in the Eastern Mediterranean after 1204* (London, 2011).
- Seipel, W., ed., *Die Magie des Goldes. Antike Schätze aus Italien* (Milan, 1996).
- Serafini, C., ed., *Esplorazioni sotto la confessione di San Pietro in Vaticano* (Vatican City, 1951).
- Shalem, A., "Objects as Carriers of Real or Contrived Memories in a Cross-Cultural Context," in Io. G. Deckers, M. Restle and A. Shalem, eds., *Mitteilungen zur*

spätantiken archäologie und byzantinischen Kunstgeschichte 4 (Wiesbaden, 2005), 101-117.

Shay, J., and Shay, T., "Modern Vegetation and Fossil Plant Remains," in ed. G. Rapp Jr., and S. E. Aschenbrenner, *Excavations at Nichoria in Southwest Greece* (Minneapolis, 1978), 41-59.

Shear, J., "The American Excavations in the Athenian Agora: Ninth Report," *Hesperia* 5. 1 (1936), 123-150.

Shepherd, D., "The Hispano-Islamic Textiles in the Cooper Union Collection," *The Chronicle of the Museum of the Arts of decoration of the Cooper Union* vol. 1, 10 (December, 1943), 357-396.

_____ "The Third Silk from the Tomb of Saint Bernard Calvo," *The Bulletin of the Cleveland Museum of Art*, Vol. 39. 1 (Jan., 1952), 13-14.

Sirks, A. J. B., *Food for Rome: the Legal Structure of the Transportation and Processing of Supples for the Imperial Distributions in Rome and Constantinople* (Amsterdam, 1991).

Smyrlis, K., *La fortune des grands monastères byzantins* (Paris, 2006).

Sorber, F., "The Making of Cloth. State of the Art Technology in the Middle Ages," in eds. M. Dewilde, A. Ervynck, A. Wielemans, *Ypres and the Medieval Cloth Industry in Flanders* (Ypres, 1996), 21-32.

Sotiropoulou, S., et al., "Panselinos' Byzantine Wall Paintings in the Protaton Church, Mounth Athos, Greece: a Technical Examination," *Journal of Cultural Heritage* 1 (2000), 91-100.

Spatharakis, I., *Corpus of Dated Illuminated Greek Manuscripts to the Year 1453*, 2 vols., (Leiden, 1981).

Spieser, J.-M., *Die Byzantinische Keramik aus der Stadtgrabung von Pergamon* (Berlin, 1996).

_____ "Travaux de L' École Française en 1971," *BCH* 96 (1972), 919-922.

_____ "Travaux de L' École Française en 1972," *BCH* 97 (1973), 541-548.

- _____ "Informatique et céramique: L'exemple de Pergame," in V. Déroche and J.-M. Spieser, *Recherches sur la céramique byzantine* (Paris, 1989), 291-302.
- Spieser, J.M., Waksman, Y., "Byzantine Ceramics Excavated in Pergamon: Archaeological Classification and Characterization of the Local and Imported Productions by PIXE and INAA Element Analysis, Mineralogy, Petrography," ed. H. Maguire, *Materials Analysis of Byzantine Pottery* (Washington D.C., 1998), 105-134.
- Spufford, P., *Money and its Use in Medieval Europe* (Cambridge, 1988).
- _____ "Trade in Fourteenth-Century Europe," in M. Jones. ed., *The New Cambridge Medieval History vol. 5 c. 1300- c, 1415* (Cambridge, 2000), 155-208.
- Stahl, A., "European Coinage in Greece after the Fourth Crusade," *Mediterranean Historical Review* 4.2 (1989) 356-363.
- _____ *The Venetian Tornosello. A Medieval Colonial Coinage* (New York, 1985).
- _____ *Zecca. The Mint of Venice in the Middle Ages* (New York, 2000).
- _____ "Venetian Coinage in Medieval Greece," in *Économies Méditerranéennes Équilibres et intercommunications XIIIe-XIXe siècles* vol. 1 (Athens, 1985), 365-373.
- _____ "The Circulation of Medieval Venetian Coinages," in *Moneta locale, Moneta Straniera: Italia ed Europa XI-XV secolo. The Second Cambridge Numismatic Symposium. Local Coins, Foreign Coins: Italy and Europe 11th – 15th Centuries* (Milan, 1999), 87-111.
- _____ "The Sterling Abroad," *The Haskins Society Journal* 18 (2006), 132-139.
- Starr, J., "The Epitaph of a Dyer in Corinth," *Byzantinisch-Neugriechische Jahrbücher* 11 (1934-35), 42-49.
- Stathakopoulos, D., "Population, Demography, and Disease," in E. Jeffreys, J. Haldon and R. Cormack, eds., *The Oxford Handbook of Byzantine Studies* (Oxford, 2008), 309-316.

- Stauffer, A., *Die Mittelalterlichen Textilien von St. Servatius in Maastricht* (Bern, 1991).
- Stewartby, L., "The Naxos Hoard of Thirteenth Century Sterlings," *NC* 154 (1994), 147-166.
- Stillwell-MacKay, T., "More Byzantine and Frankish Pottery from Corinth," *Hesperia* 36.3 (1967), 249-320.
- _____, T., "Pottery of the Frankish Period. 13th and early 14th Century," eds., C. Williams and N. Bookidis, *Corinth: The Centenary: 1896-1996* (Princeton, 2003), 401-422.
- Striker, C., and Kuban, D., "Work at Kalenderhane Cami in Istanbul: Fifth Preliminary Report (1970-74)," *DOP* 29 (1975), 306-318.
- Stiegemann, C., ed., *Byzanz. Das Licht aus dem Osten. Kult und Alltag im byzantinischen Reich vom 4. bis 15. Jahrhundert. Katalog der Ausstellung im Erzbischöflichen Diözesanmuseum, Paderborn* (Mainz, 2001).
- Stillmann, N. A., "The Eleventh Century Merchant House of Ibn 'Awkal (A Geniza Study)," *JESHO* 16.1 (1973), 73-84.
- Stone, A., "Dorylaion Revisited. Manuel I Komnenos and the Refortification of Dorylaion and Soublaion in 1175," *REB* 61 (2003), 183-199.
- Stratford, N., Tudor-Craig P., and Muthesius, A., "Archbishop Hubert Walter's Tomb and its Furnishings," in *Medieval Art and Architecture at Canterbury before 1220* (Leeds, 1982), 71-93.
- Stuard, S. M., *Gilding the Market. Luxury and fashion in Fourteenth-Century Italy* (Philadelphia, 2006).
- Tabaczynski, S., Leciejewicz, L., Tabaczynska, E., *Torcello scavi 1961-62* (Rome, 1970).
- Talbot, A. M., *Holy Women of Byzantium. Ten Saints' Lives in English Translation* (Washington D. C., 1996).
- Talbot Rice, D., "Byzantine Pottery," in the *Second Report upon the Excavations Carried out in and Near the Hippodrome of Constantinople in 1928* (London, 1929), 22-35.

- Tampoe, M., *Maritime Trade between China and the West. An Archaeological study of the Ceramics from Siraf (Persian Gulf), 8th to 15th Centuries A.D.* (Oxford, 1989).
- Tekin, O., "Byzantine Coins from Yumuk Tepe," *Anatolia Antiqua* 6 (1998), 273-278.
- Theocharis, M., "Sur le Sébastokrator Constantin Comnène Ange et l'endyté du musée de Saint Marc à Venise," *BZ* 56 (1963), 273-283.
- _____, "Il ricami," in ed. H.R. Hahnloser, *Il tesoro di San Marco. Il tesoro e il museo* (Florence, 1971), 91-96.
- Theoklieva-Stoytcheva, E., *Medieval Coins from Mesemvria* (Sofia, 2001).
- Theophilou, G., and Michailidou, M., "Βυζαντινά πινάκια απο το Φόρτιο Ναυαγιασμένου Πλοίου κοντα στο Καστελλόριζο," *AD* 41 (1986), 270-330.
- Thiriet, F., *La Romaine vénitienne au Moyen Âge* (Paris, 1959).
- Thompson, M., *The Athenian Agora. Vol. II Coins* (Princeton, 1954).
- Tietzel, B., *Deutsches Textilmuseum Krefeld. Italienische Seidensgewebe des 13, 14, und 15. Jahrhunderts* (Köln, 1984).
- Tomory, T.A., "A Study of Medieval Glazed Pottery from Aphrodisias and Cilicia," (Unpublished Ph.D. Thesis, University of Toronto, 1980).
- Toubert, P., "Un mythe historique: la sériculture italienne du haut Moyen Âge (IX^e-X^e siècles)," in eds. H. Dubois, J.-C. Hocquet, A. Vauchez, *Horizons marins, itinéraires spirituels (Ve-XVIIIe siècles): études* (Paris, 1987), 215-258.
- Touratsoglou, Io., "The Edessa/ 1968 Hoard of Billon Trachea," *AD* 28.1 (1973), 64-70.
- _____, "Unpublished Byzantine Hoards of Billon Trachea from Greek Macedonia and Thrace," *Balkan Studies* 14.1 (1973), 131-166.
- _____, "Θησαυρος άσπρων τραχέων / 1983 από την Άρτα," *AD* 36 (1981), 209-226.

- _____ "La monnaie byzantine aux XII^e-XIII^e siècles et le témoignage des trouvailles de Grèce: à propos d'un ouvrage recent," RN⁶ 158 (2002), 385-404.
- Touratsoglou, I., and Baker, J., "Byzantium of the Venetians Greece of the Grossi," in C. Maltezou, P. Schreiner, eds., *Bisanzio, Venezia e il mondo Franco-Greco (XIII-XV secolo)* (Venice, 2002), 203-233.
- Travaglini, A., "Le monete" in eds. F. D'Andria and D. Whitehouse, *Excavations at Otranto II* (Lecce, 1992), 241-278.
- Travaini, L., "Le monete di Capaccio Vecchia: campagne di scavo 1974, 1975, 1976, 1977, 1978," in A. Buko, R. D'Andria et. al., eds., *Caputaquis Medievale II* (Naples, 1984), 357-374.
- _____ "I denari "Tornesi" nella Circolazione monetaria dell'Italia Meridionale tra XIIIe XVe Secolo," in R. Martini, N. Vismara, eds., *Glaux. Collana di Studi e Ricerche di Numismatica* (Milan, 1991), vol. 3, 711-726.
- _____ *La monetazione nell'Italia normanna* (Roma, 1995).
- _____ "Produzione e distribuzione dei denari svevi e angioini nel Regno di Sicilia all luce dei rinvenimenti" in N. Christie, ed., *Settlement and Economy in Italy 1500 BC- AD 1500. Papers of the Fifth Conference of Italian Archaeology* (Oxford, 1995), 603-614.
- _____ "Deniers Tournois in South Italy," in N. J. Mayhew, ed., *The Gros Tournois. Proceedings of the Fourteenth Oxford Symposium on Coinage and Monetary History* (Oxford, 1997), 421-451.
- _____ "Federico II mutator monetae: continuità e innovazione nella politica monetaria (1220-1250), " in A. Esch and N Kamp, eds., *Friedrich II. Tagung des deutschen historischen Instituts in Rom im Gedenkjahr 1994* (Tübingen, 1996), 339-362.
- _____ *Monete e Storia Nell'Italia Medievale* (Rome, 2007).
- Turan, O., *Türkiye Selçukluları Hakkında Resmi Vesikalar. Metin, Tercüme ve Araştırmalar* (Ankara, 1958).

- Turchin, P., and Scheidel, W., "Coin Hoards Speak of Population Declines in Ancient Rome," *Proceedings of the National Academy of Sciences of the United States of America* 106.41 (2009), 17276-17279.
- Tuross, N., "Discovering the Silk Road with Stable Isotopes," Presented at the "Isotopic Silk Road: A Conversation about the Science, Archaeology, and History of Silk, The First Global Commodity Workshop," (April 3, 2012).
- Tzamalīs, A., "The First Period of the Frankish Torneseio. New Evidence from an Old Hoard," *Nomismatika Xronika* 9 (1990), 101-129.
- Vallauri, L., d'Archimbaud, G. D., with Parent, F. and Richarté, C., "La circulation des céramiques byzantines, cypriotes et du levant chrétien en Provence, Languedoc et Corse du X^e au XIV^e siècle," in ed. Ch. Bakirtzis, *Congrès international sur la céramique médiévale en Méditerranée* (Athens, 2003), 137-152.
- van Doorninck, F., "The Yassı Ada Byzantine Shipwrecks," in *Barbarian Seas: Late Rome to Islam*, S. Kingsley, ed., (London, 2004), 48-53.
- Vanhaverbeke, H., "The Evolution of the Settlement Pattern. The Early Byzantine Period and the Middle Byzantine, Late Byzantine/Selçuk, Ottoman and Recent Periods," in H. Vanhaverbeke and M. Waelkens, eds., *The Chora of Sagalassos. The Evolution of the Settlement Pattern from Prehistoric until Recent Times* (Tunhout, 2003), 285-326
- Van Loon, M. N., "The Other Medieval Objects," in *Korucutepe. Final Report on the Excavations of the Universities of Chicago, California and Amsterdam in the Keban Reservoir, Eastern Anatolia 1968-1970*, vol. 3, (Amsterdam, 1980), 263-264.
- van Uytven, R., "Cloth in Medieval Literature of Western Europe," in N.B. Harte and K.G. Ponting, eds., *Cloth and Clothing in Medieval Europe* (London, 1983), 150-183.
- Vassi, O., "An Unglazed Ware Pottery Workshop in Twelfth-Century Lakonia," *BSA* 88 (1993), 287-293.

- Veikou, M., *Byzantine Epirus. A Topography of Transformation. Settlements of the Seventh-Twelfth Centuries in Southern Epiros and Aetoloacarnania, Greece* (Leiden, 2012).
- Verger, J., "Universiät," in *Lexikon des Mittelalters* (Munich, 2003), vol. 8, 1250-1255.
- Verlinden, C., "Markets and Fairs," in *Cambridge Economic History of Europe*, M. M. Postan, E. E. Rich and E. Miller, eds., vol. 3 (Cambridge, 1965), 119-153.
- Vermoere, M., Six, S., Poblome, J., Degryse, P., Paulissen, E., Waelkens M., and Smets, E., "Pollen Sequences from the City of Sagalassos (Pisidia, Southwest Turkey)," *Anatolian Studies* 53 (2003), 161-173.
- Villechio, M. M., "Commercio e ceramica byzantina in Italia," in V. Déroche and J.-M. Spieser, *Recherches sur la céramique byzantine* (Paris, 1989), 95-107.
- Vindry, "Les ceramiques italiennes medievals en Provence orientale," in *Atti del Convegno Internazionale della Ceramica*. Issue 5, (Albisola, 1972), 241-250.
- Vionis, A. K., Poblome, J., and Waelkens, M., "Ceramic Continuity and Daily life in Medeval Sagalassos, sw Anatolia (ca. 650-1250)," in eds. T. Vorderstrasse and J. Roodenberg. *PIHANS* 113 (Leiden, 2009), 191-209.
- Vionis, A. K., Poblome, J., De Cupere, B., Waelkens, M., "A Middle-Late Byzantine Pottery Assemblage from Sagalassos: Typo-Chronology and Sociocultural Interpretation," *Hesperia* 79. 3 (2010), 423-464.
- Voegtli, H., *Die Fundmünzen aus der Stadtgrabung von Pergamon* (Berlin, 1993).
- Vogiatzoglou, V., *Επώνυμα της Μικρασίας* (Athens, 1992).
- Vogt, C., "Technologie des céramiques byzantines à glaçure d'époque Comnène," *Cahiers Archéologiques* 41 (1993) 99-110.
- Vogt, C., Bouquillon, A., Dubus, M., Querré, G., "Glazed Wall Tiles of Constantinople: Physical and Chemical Charaterization, Manufacturing, and Decorative Processes," in ed. H. Maguire, *Materials Analysis of Byzantine Pottery* (Washington D.C., 1998), 51-57.
- Volbach, W, F., *I Tessuti del Museo Sacro Vaticano* (Vatican City, 1942).

- von Falkenhausen, V., "La Circolazione Monetaria nell'Italia meridionale e nella Sicilia in epoca Normanna secondo la Documentazione di Archivio," *Bolletino di Numismatica* 6-7 (1986), 55-80.
- von Wartburg, M. L., "Mittelalterliche Keramik aus dem Aphroditeheiligtum in Palaipaphos (Grabungsplatz TA)," *Archäologischer Anzeiger*, Heft 1 (1998), 133-165.
- "Cypriot Contact with East and West as Reflected in Medieval Glazed Pottery from the Paphos Region," in ed. Ch. Bakirtzis, *Congrès international sur la céramique médiévale en Méditerranée* (Athens, 2003), 153-166.
- von Wilckens, L., *Die Mittelalterlichen textilien. Katalog der Sammlung (von Herzog Anton Ulrich-Museum Braunschweig)* (Brunswick, 1994).
- _____ "Some Remarks on Spanish Samites from the 12th and 13th Centuries," *CIETA* 70 (1992), 87-90.
- _____ "Byzantinische, griechische, sizilische, italienische und andere Stickereien des 12. und 13. Jahrhunderts," in B. Borkopp, B. Schellewald, L. Theis, eds., *Studien zur byzantinischen Kunstgeschichte. Festschrift für Horst Hallensleben zum 65. Geburtstag* (Amsterdam, 1995), 279-285.
- Vroom, V., *After Antiquity. Ceramics and Society in the Aegean from the 7th to the 20th century A.C. A Case Study from Boeotia, Central Greece* (Leiden, 2003).
- _____ *Byzantine to Modern Pottery in the Aegean. An Introduction and Field Guide* (Utrecht, 2005).
- _____ "Byzantine Garlic and Turkish Delight," in *Archaeological Dialogues* 7 (2000), 199-216.
- _____ "The Medieval and Post-Medieval Finewares and Cooking Wares from the Triconch Palace and the Baptistry," in R. Hodges, W. Bowden and K. Lako, eds., *Byzantine Butrint: Excavations and Surveys 1994-1999* (Oxford, 2004), 278-292.
- _____ "Medieval Pottery from the Artemision in Ephesus: Imports and Locally Produced Wares," in F. Krinzing, ed., *Spätantike und mittelalterliche*

- Keramik aus Ephesos* (Verlag der Österreichischen Akademie der Wissenschaften no. 332, Vienna, 2005), 17-49.
- _____ "Some Byzantine Finds from Kaman Kalehöyük. First Observation," *Anatolian Archaeological Studies* 15 (2006), 163-169.
- _____ "The Changing Dining Habits at Christ's Table," in L. Brubaker and K. Linardou, eds., *Eat, Drink, and Be Merry (Luke 12:19)- Food and Wine in Byzantium*, (London, 2007), 191-222.
- Vryonis, S., "Nomadization and Islamization in Asia Minor," *DOP* 29 (1975), 41-71.
- Waksman, Y., "Chemical Analyses," in F. Krinzing, ed., *Spätantike und mittelalterliche Keramik aus Ephesos* (Verlag der Österreichischen Akademie der Wissenschaften no. 332, Vienna, 2005), 59-66.
- Wales, C., "The Treatment of Wall Paintings at the Kariye Camii," *Studies in Conservation* 3 (1958), 120-124.
- Wallis, H., *Byzantine Ceramic Art. Notes on Examples of Byzantine Pottery Recently Found at Constantinople with Illustrations* (London, 1907).
- Wardwell, A., "The Stylistic Development of 14th and 15th Century Italian Silk Design," *Aachener Kunstblätter* 47 (1976-77), 177-226.
- _____ "Panni Tartarici: Eastern Islamic Silks Woven with Gold and Silver (13th and 14th Centuries)" *Islamic Art* 3 (1988-89), 95-173.
- Watson, A., *Agricultural Innovation in the Early Islamic World. The Diffusion of Crops and Farming Techniques* (Cambridge, 1983).
- Wells, B., and Runnels, C., eds. *The Berbati-Limnes Archaeological Survey 1988-1990* (Stockholm, 1996).
- White, L., *Medieval Technology and Social Change* (Oxford, 1962).
- Whitehouse, D., "The Medieval Glazed Pottery of Lazio," *BSR* 35 (1967), 40-86.
- _____ "The Medieval and Renaissance Pottery," *BSR* 40 (1972), 209-235.

- _____. "The Medieval Pottery of Rome," eds. Blake, H., Potter T.W., and Whitehouse, D. B., *Papers in Italian Archaeology, BAR Supplementary Series* 41 (Oxford, 1978), 475-505.
- _____. "Note sulla ceramica dell' Italia meridionale nei secoli XII-XIV," *Faenza* 68 (1982), 185-197.
- _____. "Apulia," in *La ceramica medievale nel mediterraneo occidentale* (Florence, 1986), 573-585.
- _____. "Glassmaking at Corinth: A Reassessment," *Ateliers de Verriers. De L'Antiquité à la période pré-industrielle* (Rouen, 1999), 73-78.
- Whitwell, R. J., "Italian Bankers and the English Crown," *Transactions of the Royal Historical Society* 17 (1903), 175-233.
- _____. "English Monasteries and the Wool Trade in the 13th Century," *Vierteljahrschrift für sozial- und wirtschaftsgeschichte* 2 (1904), 1-33.
- Wikander, Ö., *Handbook of Ancient Water Technology* (Leiden, 2000).
- Wild, J. P., "Textile Production and Trade in Roman Literature and Written Sources," in eds. D. Cadron and M. Feugère, *Archéologie des textiles. Des origines au V^e siècle*. (Montagnac, 2000), 209-213.
- Williams, C., "The Pottery and Glass at Alahan," in ed. M. Gough, *Alahan. An Early Christian Monastery in Southern Turkey* (Wetteren, 1985), 35-61.
- Williams, C. K., Zervos, O. H., "Corinth, 1982: East of the Theater," *Hesperia*, 52. 1 (1983), 1-47.
- Williamson, T., *Shaping the Medieval Landscapes. Settlement, Society, Environment* (Cheshire, 2004).
- Wilkinson, T. J., *Town and Country in Southeastern Anatolia vol I Settlement and Land Use at Kurban Höyük and Other Sites in the Lower Karababa Basin*, (Chicago, 1991).
- Wilson, A., "Water-Mills at Amida: Ammianus Marcellinus 18. 8. 11," *Classical Quarterly* 51.1 (2001), 231-236.

- _____. "Machines, Power and the Ancient Economy," *The Journal of Roman Studies* 92 (2002), 1-32.
- Wolff, R. L., "Romania: The Latin Empire of Constantinople," *Speculum* 23.1. (1948), 1-34.
- Wolff, P., Mauro, F., *Histoire générale du travail. L'Age de l'artisanat (Ve-XVIIIe siècles)* (Paris, 1960).
- Wren, C., *The Short Cross Coinage 1180-1247* (Kent, 1992).
- _____. *The Voided Long-Cross Coinage. 1247-1279. Henry III and Edward I* (Kent, 1993).
- Wright, M., *Weaving Narrative: Clothing Industry in Twelfth-Century French Romance* (University Park, P.A., 2009).
- Xoplaki, E., Fleitmann, D., and Diaz, H. F., eds., "Medieval Climate Anomaly," *Pages News* 19.1 (2011), 4-32: http://www.pages-igbp.org/download/docs/NL2011-1_lowres.pdf (Accessed 1. 5. 2013).
- Xyngopoulos, A., "Byzantine Pottery from Olynthus," in D. M. Robinson, *Excavations at Olynthus. Part 5 Mosaics, Vases, and Lamps of Olynthus Found in 1928 and 1931* (Baltimore, 1933), 285-292.
- Yakobson, A. L., "Srednevekovaja polivnaja keramika kak istoriceskoe javlenie," *VizVrem* 39 (1978) 148-159.
- Yalman, B., "Iznik Tiyatro Kazısı," *KST* 6 (1984), 459-467.
- _____. "Iznik Tiyatro Kazısı 1985," *KST* 8. 2 (1986), 570-595.
- _____. "Iznik Tiyatro Kazısı 1986," *KST* 9. 2 (1987), 299-328.
- _____. "Iznik Tiyatro Kazısında Bulunan Çini Fırını," *Sanat Tarihi Yıllığı* 13 (1988), 153-197.
- _____. "2002 Yılı Iznik Tiyatro Kazısı," *KST* 25. 2 (2003), 391-402.
- Yardımcı, N., *Harran Ovası Yüzey Araştırması. Archaeological Survey of the Harran Plain* (Istanbul, 2004).

- Yenişehirlioğlu, F., "La céramique glaçurée de Gülpınar," in V. Déroche and J.-M. Spieser, eds., *Recerches sur la céramique byzantine* (Paris, 1989), 303-315.
- _____, "Apollo Simntheus Tapınağında Çıkan Ortaçağ Sırlı Seramikleri," I. *Araştırma Sonuçları Toplantısı* (Ankara, 1983), 175-181.
- Yıldız, S. N., "Manuel Komnenos Mavrozomes and his Descendants at the Seljuk Court: The Formation of a Christian Seljuk-Komnenian Elite," in S. Leder, ed., *Crossroads between Latin Europe and the Near East: Corollaries of the Frankish Presence in the Eastern Mediterranean* (12th -14th Centuries) (Würzburg, 2011), 55-77.
- Yılmaz, S., "Hierapolis Antik Kenti Tripolis Caddesi Temizlik ve Düzenleme Çalışmaları," VI. Müze Kurtarma Çalışmaları Semineri Didim 1995 (Ankara, 1996), 131-162.
- Zachariadou, E., *Trade and Crusade. Venetian Crete and the Emirates of Menteshe and Aydın (1300-1415)* (Venice, 1983).
- Zekos, N., "A Glazed Pottery Workshop in Thrace," ed. Ch. Bakirtzis, *Congrès international sur la céramique médiévale en Méditerranée* (Athens, 2003), 455-466.
- Zhi-Qiang, C., "Narrative Materials about the Byzantines in Chinese Sources," J. Burke, U. Betka, P. Buckley, K. Hay, R. Scott, A. Stephenson, eds., *Byzantine Narrative* (Melbourne, 2006), 505-521.
- Ziolkowski, J., *Talking Animals. Medieval Latin Beast Poetry 750-1150* (Philadelphia, 1993).
- Zorn, B., Hilgner, A., eds. *Glass along the Silk Road from 200 BC to AD 1000* (Mainz, 2010).

Appendix 1 Complementary Hoard Tables

Twelfth-Century Hoards, Greece

Hoard	Total number of coins in hoard	Total approximate value of coins in hoard in <i>billon trachea</i>	The total number/percentage of twelfth-century coins in the hoard	Approximate deposition date (t.p.q)
1. Adrameri	4	192	all	ca. 1118
2. Athens 1982	7	0.2	all	ca. 1180
3. Western Attika	58	1.6	all	ca. 1180
4. Corinth 1911-1912	177	5	all	ca. 1118
5. Corinth I	518	16	all	ca. 1143
6. Corinth II	30	1,440	all	ca. 1180
7. Drosato Eupaliou Doridos	34	1	all	ca. 1118
8. Gerakini 1932	24	24	all	ca. 1180
9. Grivitsa Pylas Messenia	9	324	all	ca. 1118
10. Hagios Horos (Mt. Athos)	10	1/4	all	ca. 1180
11. Kalentzi Fragma Marathon 1928	365	10	all	ca. 1150
12. Kaparelli 1927	152	5	all	ca. 1185

Twelfth-Century Hoards, Greece (Continued)

13. Kastoria 1945	9	324	all	ca. 1143
14. Kastri Attikes 1952	968	30	all	ca. 1185
15. Kephisia 1893	11	1/4	all	ca. 1180
16. Komotini 1979	97	2.7	all	ca. 1185
17. Magoula Ithomes Trikalon 1900	4	64	all	ca. 1185
18. Magoula Eleusinos	230	7	all	ca. 1180
19. Naxos 1967	21	36	all	ca. 1180
20. Oreoi Euboeias 1935	1,688	33	all	ca. 1180
21. Paliotheologou Melivoias 1988	100	4,800	all	ca. 1143
22. Thebes 1992	152	4	all	ca. 1180
23. Thespies 1966	174	5	all	ca. 1143
24. Thessalonike 1933	112	6	all	ca. 1118
25. Thessalonike 1933	3	1/12	all	ca. 1143
26. Thessalonike 1966	40	40	all	ca. 1180
27. Unknown Greek 1911	1,791	50	all	ca. 1195
28. Unknown Greek II	12	192	all	ca. 1195

Twelfth-Century Hoards, western Asia Minor

Hoard	Total number of coins in hoard	Total approximate value of coins in hoard in <i>billon trachea</i>	The total number/percentage of twelfth-century coins in the hoard	Approximate deposition date (t.p.q)
Izmir	58	58	all	ca. 1143
Fethiye	12	576	all	ca. 1118
Aphrodisias 1969	4	64	all	ca. 1180

Twelfth-Century Hoards, Constantinople

Hoard	Total number of coins in hoard	Total approximate value of coins in hoard in <i>billon trachea</i>	The total number/percentage of twelfth-century coins in the hoard	Approximate deposition date (t.p.q)
Istanbul A	1,088	1,088	all	ca. 1185
Pınarhisar	7	336	all	Twelfth century

Thirteenth-Century Hoards, Greece (Hoards not included in Table 1. 5)

Hoard	Total number of coins in hoard	Total approximate value of coins in hoard in <i>billon trachea</i>	The total number/percentage of twelfth-century coins in the hoard	Approximate deposition date (t.p.q)
1. Arta 1923	74	> 74	none	ca. 1271
2. Arta	130	>130	none	ca. 1282
3. Brauron	206	6	132 (64 percent)	ca. 1204
4. Central Macedonia	110	>110	32 (29 Percent)	ca. 1208

Thirteenth-Century Hoards, Greece (Continued)

5. Corinth III	23	>23	none	ca. 1208
6. Edessa 1968	22	>22	18 (82 percent)	ca. 1230
7. Episkopi 1970	59	>59	25 (42 percent)	ca. 1204
8. Gerakario 1972	69	>69	55 (79 percent)	ca. 1204
9. Macedonia (Thessalonike Museum)	551	>551	126 (34 percent)	ca. 1208
10. Kephallenia	12	>12	3 (25 percent)	ca. 1204
11. Kordokopi	308	667	none	ca. 1250
12. Neapolis	35	>35	none	ca. 1208
13. Neon Rhysson	10	10	4 (40 percent)	ca. 1204
14. Sparta	5	>5	none	ca. 1204
15. Thessalonike 1963	16	>16	none	ca. 1204
16. Unknown Greek	792	>792	74 (9 percent)	ca. 1208
17. Unknown Greek	65	>65	11 (16 percent)	Thirteenth century
18. Unknown Greek	358 (originally)	>358	none	Thirteenth century
19. Unknown Greek	73	>73	none	ca. 1230
20. Unknown Greek	200 (originally)	>200	none	Thirteenth century
21. Xerochori 1957	1754	2,640	none	ca. 1250
22. Xerochori 2001	4	185	none	ca. 1250

Thirteenth-Century Hoards, western Asia Minor (Hoards not included in Table 1. 6)

Hoard	Total number of coins in hoard	Total approximate value of coins in hoard in <i>billon trachea</i>	The total number/percentage of twelfth-century coins in the hoard	Approximate deposition date (t.p.q)
Kocaeli	38	2,280	none	1250?
Pergamon I	36	2,160	none	Mid thirteenth century?
Sinekli (Silivri?)	40	2,400	none	Mid thirteenth century?
Torbali (Izmir)	247	3,952	none	ca. 1254
Troy	140	>140	none	ca. 1210

Appendix 2

Chronological list of Church and Royal Inventories, Secular Wills Used in Part II

This appendix is intended as an aid to Chapter 9. The chapter examines inventories from seven different locations, comprising roughly about 2,200 textile items inventoried across a time span from ca. 1250 to ca. 1500. The chapter supplements these church inventories with much smaller and sporadic sets of secular testaments (with about 900 textile entries), which, apart from two mid-thirteenth century wills, all date from the fourteenth century. Below is a brief, chronologically arranged summary of the references to the inventories and the wills. An extensive dataset containing all the textile items listed in each inventory, together with their extensive descriptions, awaits future work. The reader should note that the calculations made in the chapter concern the textiles whose provenances are mentioned, which constitute a much smaller proportion of the total textile items. The textile items themselves constitute an extensively varied group that range from copes, matels to curtains and pillows. The number and types of textiles in each inventory too varies.

1245 Cathedral Church of St. Paul London:¹

1264 Testament of Venetian Pietro Vioni:²

1266 Testament of French lord of Nevers:³

1285-1295 and 1315 Inventories of the cathedral Church of Canterbury:⁴ The first set from 1285-1295 has no references to textile items.

¹ W. Sparrow Simpson, "Two Inventories of the Cathedral Church of St. Paul, London, dated respectively 1245 and 1402; now, for the first time, printed, with an Introduction," *Archaeologia* 50 (1887), 439-524. Also see L. Monnas, *Merchants Princes and Painters*, Appendix 4, 310-313 for the "copes with named benefactors" in the 1295 inventory of the same church. For the 1295 Inventory also see, W. Dugdale, *Monasticon anglicanum, or, the history of the ancient abbies, and other monasteries, hospitals, cathedral and collegiate churches, in England and Wales*, vol. 3 (1693).

² B. Ceccheti, "Testamento di Pietro Vioni Veneziano fatto in Tauris (Persia) X Dicembre," *Archivio Veneto* 26 (1883), 161-165.

³ M. Chazaud, "Inventaire et comptes de la succession d'études, comte de Nevers (Acre 1266)," *Memories de la société des antiquaires de France* 32 (1871), 164-206.

⁴ J. Dart, *The History and Antiquities of the Cathedral Church of Canterbury* (London, 1726).

1294 Inventory of the Vatican:⁵ This inventory has consecutive inventories dating from 1361, 1436 and 1481.

1295 Inventory of the Church of St. Peter at the Vatican:⁶

1314 Inventory of the Avignon Papacy:⁷ This inventory has consecutive inventories dated to 1316, 1320, 1342, 1353, 1369 and 1371.

1317 Inventory of Philip the Tall (1317-1322).⁸ This source contains subsequent inventories from 1328, 1342 and 1387.

1318-1376 Wills from Venetian Crete.⁹

ca. 1324 Select Testaments from Venice from the early fourteenth century, including that of Marco Polo.¹⁰

1343 Inventory of the Cathedral Church of Notre Dame of Paris.¹¹

1369 Inventory of the Cathedral Church of Pisa:¹² Includes subsequent inventories. The 1369 and 1394 inventories are the largest inventories, later inventories are much smaller. The latest inventory in this set dates from 1608.

1387 Inventory of items belonging to Charles V (1364-1380).¹³

⁵ E. Münz, A.L. Frothingham, *Il Tesoro della Basilica di S. Pietro in Vaticano dal XIII al XV secolo con una scelta d'inventarii inediti* (Rome, 1883).

⁶ É. Molinier, *Inventaire du trésor du Saint Siège sous Boniface VIII* (Paris, 1888). Molinier's inventory is separate from the inventory of the Church of St. Peter which Münz and Frothingham published five years earlier than Molinier's work.

⁷ H. Hoberg, *Die Inventare des päpstlichen schatzes in Avignon* (Vatican, 1944).

⁸ L. Douet, *Nouveau recueil de comptes de l'argenterie des rois de France* (Paris, 1874).

⁹ S. McKee, ed., *Wills From Late Medieval Crete 1312-1420*, 3 vols. (Washington D.C., 1998).

¹⁰ B. Cecchetti, *La vita dei veneziani nel 1300. Le vesti* (Venice, 1886), 112-129.

¹¹ G. Fagniez, "Inventaires du trésor de Notre Dame de Paris," *Révue archéologique* 27 (Jan-June, 1874), 249-259 and *Révue archéologique* 28 (July-December, 1874), 83-102.

¹² R. Barsotti, *Gli Antichi inventari della cattedrale di Pisa* (Pisa, 1959).

¹³ J. Labarte, *Inventaire du mobilier de Charles V, Roi de France* (Paris, 1879).

Appendix 3

A Gazetteer of Ceramic Finds (in alphabetical order)

The appendix provides a site-by-site overview of the ceramic finds and their types. When the exact numbers of fragments of a fine ware are given in survey or excavation reports, I have included that number. If these numbers are not given, but a ware type is attested at a given site then the box is checked with an “X.” A box is left empty because the excavation or the survey report does not provide an explicit answer. Boxes are checked “Y” or “N” (yes and no) if the reports explicitly qualify the status of a site or a type of ceramic from a site.

The appendix also allows for a useful analysis of the dating of Byzantine fine ware ceramics that were produced between ca. 1150 and ca. 1250. It is important to note that the relative datings discussed in detail in Part 2 are consistent with each other and the dating provided by Vroom in her study of the fine ceramics from the Boiotia survey.¹ Part 2 and this appendix, therefore, can potentially provide a tool for the relative datings of the sites, especially if all other archaeological, documentary sources are inadequate.

¹ J. Vroom, *After Antiquity. Ceramics and Society in the Aegean from the 7th to the 20th Century A. C. A Case Study from Boeotia, Central Greece* (Leiden, 2003).

Appendix 3. A Gazetteer of Ceramic Finds

<i>Site</i>	<i>Production Site?</i>	<i>Kiln?</i>	<i>Tripods/Stilts?</i>	<i>Wasters?</i>	<i>Total Number of Fragments</i>	<i>Total Number Certain?</i>	<i>Total Number of Fine Ware Fragments</i>	<i>Total Number of Fine Ware Certain?</i>	<i>Fragment Type, Proportions given?</i>	<i>Plate</i>
Al Mina	Y			Y					Lists only; proportions not given	X
Alahan	N	N	N	N					Lists only; proportions not given	
Alanya									Lists only; proportions not given	
Alexandria, Egypt						N			Y a few fragments	
Alonissos-Pelagonissos	N	N	N	N	1,490	Y	625	Y	Y	213
Amorium	Y	Y		Y	80				Y	
Anaia, Kuşadası	Y	N	X	Y					Y	

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Production Site?</i>	<i>Kiln?</i>	<i>Tripods/Stilts?</i>	<i>Wasters?</i>	<i>Total Number of Fragments</i>	<i>Total Number Certain?</i>	<i>Total Number of Fine Ware Fragments</i>	<i>Total Number of Fine Ware Certain?</i>	<i>Fragment Type, Proportions given?</i>	<i>Plate</i>
Andros Island		N				N			Lists only; proportions not given	
Anemourion									Lists only; proportions not given	
Aphrodisias									Lists only; proportions not given	
Argos	Y	Y	Y	Y		N			Lists only; proportions not given	
Arta		N							Lists only; proportions not given	
Aslantaş Dam Kumkale					2,000	N		N	Y	X

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Production Site?</i>	<i>Kiln?</i>	<i>Tripods/Stilts?</i>	<i>Wasters?</i>	<i>Total Number of Fragments</i>	<i>Total Number Certain?</i>	<i>Total Number of Fine Ware Fragments</i>	<i>Total Number of Fine Ware Certain?</i>	<i>Fragment Type, Proportions given?</i>	<i>Plate</i>
Assos and Ainos (Enez)	Y	Y	Y							
Athens Agora		N			120	N catalogued		120	Y	28
Berbati-Limnes Survey		N				N			Lists only; proportions not given	
Boiotia survey		N		Y	12,000	N				
Butrint Baptistery		N					636	Y	Y	
Butrint Triconch Palace		N					494	Y	Y	
Çamaltı Burnu Wreck										
Carrara Santo Stefano, Italy					10				bacini	

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Production Site?</i>	<i>Kiln?</i>	<i>Tripods/Stilts?</i>	<i>Wasters?</i>	<i>Total Number of Fragments</i>	<i>Total Number Certain?</i>	<i>Total Number of Fine Ware Fragments</i>	<i>Total Number of Fine Ware Certain?</i>	<i>Fragment Type, Proportions given?</i>	<i>Plate</i>
Chiaravalle, Italy					12				bacini	
Constantinople, Agia Irene	N								Y	
Constantinople, Great Palace	N				7,000	N	2,500	N	Y	X
Constantinople, Kalenderhane	N				230,000	N			Y	
Constantinople, Myrelaion	N				14				Y	
Constantinople, Saraçhane	N				20,000	N			Y	X
Corinth	Y	Y (associated w/ Manuel I and Alexios I coins)				Y	1,788		Y	

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Production Site?</i>	<i>Kiln?</i>	<i>Tripods/Stilts?</i>	<i>Wasters?</i>	<i>Total Number of Fragments</i>	<i>Total Number Certain?</i>	<i>Total Number of Fine Ware Fragments</i>	<i>Total Number of Fine Ware Certain?</i>	<i>Fragment Type, Proportions given?</i>	<i>Plate</i>
Crete		N				N			Lists only; proportions not given	
Delos Island		N				N			Lists only; proportions not given	
Demre (Myra)			Y		15,831	Y	1,258	Y	Y	X
Edremit			Y	Y						
Elis		N	N	N		N			Lists only; proportions not given	
Enkomi, Cyprus			Y	Y		N			Lists only; proportions not given	

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Production Site?</i>	<i>Kiln?</i>	<i>Tripods/Stilts?</i>	<i>Wasters?</i>	<i>Total Number of Fragments</i>	<i>Total Number Certain?</i>	<i>Total Number of Fine Ware Fragments</i>	<i>Total Number Fine Ware Certain?</i>	<i>Fragment Type, Proportions given?</i>	<i>Plate</i>
Ephesus									Lists only; proportions not given	X
Ephesus Artemision	Y		Y		1005	Y	705	Y	Y	
Ferrara						9			bacini	
Ganos		?	Y						Lists only; proportions not given	
Gaziköy	Y	Y	Y							
Genoa	N					17			bacini	
Genoa, Palazzo Ducale	N								Y	X
Genoa, San Silvestro	N				20,000	N	?	N	Y	

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Production Site?</i>	<i>Kiln?</i>	<i>Tripods/Stilts?</i>	<i>Wasters?</i>	<i>Total Number of Fragments</i>	<i>Total Number Certain?</i>	<i>Total Number of Fine Ware Fragments</i>	<i>Total Number Fine Ware Certain?</i>	<i>Fragment Type, Proportions given?</i>	<i>Plate</i>
Gritille					3,200	N			Y	
Gülpınar	?								Y	
Hierapolis		Y		X					Lists only; proportions not given	
Issos (Kinet)							159	Y	Y	
Isthmia, Corinth		N				N			Lists only; proportions not given	
Kaman Kalehöyük					577	Y			Lists only; proportions not given	
Karacahisar Kalesi, Eskişehir									Lists only; proportions not given	
Kastellorizo					139	N	139	Y	Y	X

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Production Site?</i>	<i>Kiln?</i>	<i>Tripods/Stilts?</i>	<i>Wasters?</i>	<i>Total Number of Fragments</i>	<i>Total Number Certain?</i>	<i>Total Number of Fine Ware Fragments</i>	<i>Total Number Fine Ware Certain?</i>	<i>Fragment Type, Proportions given?</i>	<i>Plate</i>
Korucutepe, Keban Dam	Y	Y	Y						Y	
Kouklia, Cyprus		N	N	N		N			Lists only; proportions not given	
Magnesia ad Meandrum	Y	Y	Y	Y					Lists only; proportions not given	
Marseille, France	N					N			"a few fragments"	
Milet									Lists only; proportions not given	
Nicaea, Roman Theatre	Y	Y	Y						Lists only, no prop.	
Nice, France	N					N			"a few fragments"	
Olynthus		N	N						Lists only	

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Production Site?</i>	<i>Kiln?</i>	<i>Tripods/Stilts?</i>	<i>Wasters?</i>	<i>Total Number of Fragments</i>	<i>Total Number Certain?</i>	<i>Total Number of Fine Ware Fragments</i>	<i>Total Number Fine Ware Certain?</i>	<i>Fragment Type, Proportions given?</i>	<i>Plate</i>
Otranto					783 (including 13C Chinese porcelain)	Y				X
Paphos, Cyprus		N				N			"Zeux. Considerable"	
Parma	N					2			bacini	
Pavia	N					N			5-10 bacini	
Pergamon	Y		Y	Y	594	Y			Y	X
Phokis survey		N			678	Coarse wares not collected unless diagnostic	Y		Lists only; proportions not given	

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Production Site?</i>	<i>Kiln?</i>	<i>Tripods/Stilts?</i>	<i>Wasters?</i>	<i>Total Number of Fragments</i>	<i>Total Number Certain?</i>	<i>Total Number of Fine Ware Fragments</i>	<i>Total Number Fine Ware Certain?</i>	<i>Fragment Type, Proportions given?</i>	<i>Plate</i>
Phokis survey		N			678	Coarse wares not collected unless diagnostic	Y		Lists only; proportions not given	
Pisa	N					56			bacini	
Prusa (Bursa)	Y								Lists only; proportions not given	
Rovereto, Italy						3			bacini	
Sagalassos	N									X
Samosata									from museum collection	

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Production Site?</i>	<i>Kiln?</i>	<i>Tripods/Stilts?</i>	<i>Wasters?</i>	<i>Total Number of Fragments</i>	<i>Total Number Certain?</i>	<i>Total Number of Fine Ware Fragments</i>	<i>Total Number Fine Ware Certain?</i>	<i>Fragment Type, Proportions given?</i>	<i>Plate</i>
Taşkun Kale					442	Y	141	Y	Y	X
Sapes	Y		Y		200 (from shops)	N			Lists only; proportions not given	X
Sardis					43	Y	37		Y	X
Serçe Limanı, Bodrum	N								Y	
Serres	Y		Y						Lists only; proportions not given	
Smyrna										
Sophene (Aşvan Kale)	Y	Y			891	Y	450	N	Y	X
Sparta	Y	Y	Y	Y		N			Lists only; proportions not given	

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Production Site?</i>	<i>Kiln?</i>	<i>Tripods/Stilts?</i>	<i>Wasters?</i>	<i>Total Number of Fragments</i>	<i>Total Number Certain?</i>	<i>Total Number of Fine Ware Fragments</i>	<i>Total Number Fine Ware Certain?</i>	<i>Fragment Type, Proportions given?</i>	<i>Plate</i>
Thassos	?	N					470	N	Y	9
Thebes		N		Y	330	Y	148		Y	
Thessalonike (Rotunda St. George)			Y	Y			2,000	N	Y	
Tille Höyük				Y	358	Y	107	N		X
Troas (Beşik Tepe)				? Possible			133	N	Y	
Varazze, Italy	N					10			bacini	
Venice and the Laguna	N					43			bacini and fragments	
Yumuktepe, Mersin									<i>Lists only; proportions not given</i>	

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Bowl</i>	<i>White Ware (w/o specification)</i>	<i>CWW1</i>	<i>CWW2</i>	<i>CWW3</i>	<i>CWW4</i>	<i>CWW4 with coins</i>	<i>Monochrome</i>	<i>Polychrome</i>	<i>Lusterware</i>	<i>Green & Brown Painted</i>	<i>Slip- Painted</i>
Al Mina						X						
Alahan												
Alanya												
Alexandria, Egypt												
Alonissos- Pelagonissos	412											X
Amorium	X			X								
Anaia, Kuşadası		X					X				X	
Andros Island												
Anemourion												
Aphrodisias											X	X
Argos		X									X	X

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Bowl</i>	<i>White Ware (w/o specification)</i>	<i>CWW1</i>	<i>CWW2</i>	<i>CWW3</i>	<i>CWW4</i>	<i>CWW4 with coins</i>	<i>Monochrome</i>	<i>Polychrome</i>	<i>Lusterware</i>	<i>Green & Brown Painted</i>	<i>Slip- Painted</i>
Arta								X				X
Aslantaş Dam Kumkale	X											
Assos and Ainos (Enez)												
Athens Agora	78	X						X	X		20	4
Berbati- Limnes Survey											X	1
Boiotia survey		1 fragment									X	X
Butrint Baptistery												
Butrint Triconch Palace	X							50	53		1	
Çamaltı Burnu Wreck												
Carrara Santo Stefano, Italy												
Chiaravalle, Italy												

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Bowl</i>	<i>White Ware (w/o specification)</i>	<i>CWW1</i>	<i>CWW2</i>	<i>CWW3</i>	<i>CWW4</i>	<i>CWW4 with coins</i>	<i>Monochrome</i>	<i>Polychrome</i>	<i>Lusterware</i>	<i>Green& Brown Painted</i>	<i>Slip- Painted</i>
Constantinople, Agia Irene		early form of WW							X			
Constantinople, Great Palace	X							0	20	0	13	4
Constantinople, Kalenderhane						1	1 with coins latest 1261- 1295					
Constantinople, Myrelaion		2										
Constantinople, Saraçhane	X	5,000							175		5	5
Corinth		79						67	86	63	150	X
Crete									X		X	X
Delos Island											3	
Demre (Myra)	X	X										

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Bowl</i>	<i>White Ware (w/o specification)</i>	<i>CWW1</i>	<i>CWW2</i>	<i>CWW3</i>	<i>CWW4</i>	<i>CWW4 with coins</i>	<i>Monochrome</i>	<i>Polychrome</i>	<i>Lusterware</i>	<i>Green& Brown Painted</i>	<i>Slip- Painted</i>
Enkomi, Cyprus												X
Ephesus	X	X						X	X		X	
Ephesus Artemision								359 (“all green glazed”)				
Ferrara												
Ganos												
Gaziköy												
Genoa												
Genoa, Palazzo Ducale	X							X			X	3
Genoa, San Silvestro												3
Gritille	X							X				X
Gülpınar												X

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Bowl</i>	<i>White Ware (w/o specification)</i>	<i>CWW1</i>	<i>CWW2</i>	<i>CWW3</i>	<i>CWW4</i>	<i>CWW4 with coins</i>	<i>Monochrome</i>	<i>Polychrome</i>	<i>Lusterware</i>	<i>Green & Brown Painted</i>	<i>Slip- Painted</i>
Hierapolis		X						X	X			X
Issos (Kinet)											X	X
Isthmia, Corinth												
Kaman Kalehöyük				2	1	1						
Karacahisar Kalesi, Eskişehir												X
Kastellorizo	X										51	8
Korucutepe, Keban Dam	X								X			X
Kouklia, Cyprus											X	
Magnesia ad Meandrum			X									

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Bowl</i>	<i>White Ware (w/o specification)</i>	<i>CWW1</i>	<i>CWW2</i>	<i>CWW3</i>	<i>CWW4</i>	<i>CWW4 with coins</i>	<i>Monochrome</i>	<i>Polychrome</i>	<i>Lusterware</i>	<i>Green & Brown Painted</i>	<i>Slip- Painted</i>
Marseille, France												
Milet		X										
Nicaea, Roman Theatre		X										X
Nice, France	X											
Olynthus	X	X (29)										
Otranto		X									X	
Paphos, Cyprus									X		X	X
Parma												
Pavia	X	3								X	X	

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Bowl</i>	<i>White Ware (w/o specification)</i>	<i>CWW 1</i>	<i>CWW2</i>	<i>CWW3</i>	<i>CWW4</i>	<i>CWW4 with coins</i>	<i>Monochrome</i>	<i>Polychrome</i>	<i>Lusterware</i>	<i>Green & Brown Painted</i>	<i>Slip- Painted</i>
Pergamon												X
Phokis survey											X	X
Pisa												
Prusa (Bursa)												
Rovereto, Italy												
Sagalassos	X										1	X
Samosata	X									X		
Sapes	X							X				X
Sardis	43											
Serçe Limani, Bodrum	X							6	1			
Serres									X			X

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Bowl</i>	<i>White Ware (w/o specification)</i>	<i>CWW 1</i>	<i>CWW2</i>	<i>CWW3</i>	<i>CWW4</i>	<i>CWW4 with coins</i>	<i>Monochrome</i>	<i>Polychrome</i>	<i>Lusterware</i>	<i>Green & Brown Painted</i>	<i>Slip-Painted</i>
Smyrna											X	
Sophene (Aşvan Kale)	X							X		X		
Sparta		X									X	X
Taşkun Kale	X								X			
Thassos	18							78			8	7
Thebes		3						X			5	9
Thessalonike (Rotunda St. George)		X							X		X	
Tille Höyük	X							X		X		
Troas (Beşik Tepe)	X	X										
Yumuktepe, Mersin								X	X			X

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Splash-Decorated (Islamic)</i>	<i>Fine Sgraffito</i>	<i>Champlevé</i>	<i>Sgraffito Miscell.</i>	<i>Aegean Ware</i>	<i>Measles Ware</i>	<i>Zeuxippus Ware</i>	<i>Italian Maiolica/Proto M</i>	<i>Roulette Ware</i>	<i>Metallic Ware</i>	<i>RMR</i>	<i>PSS</i>
Al Mina							X					X
Alahan				X								
Alanya			X	X								X?
Alexandria, Egypt			X	X			X					X
Alonissos-Pelagonissos		X										
Amorium												
Anaia, Kuşadası				X	X		X					
Andros Island				X			X	X				
Anemourion				X				X				
Aphrodisias				X								
Argos			X	X		X	0	X	X			
Arta				X				X	X			

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Splash-Decorated (Islamic)</i>	<i>Fine Sgraffito</i>	<i>Champlevé</i>	<i>Sgraffito Miscell.</i>	<i>Aegean Ware</i>	<i>Measles Ware</i>	<i>Zeuxippus Ware</i>	<i>Italian Maiolica/Proto M</i>	<i>Roulette Ware</i>	<i>Metallic Ware</i>	<i>RMR</i>	<i>PSS</i>
Aslantaş Dam Kumkale				X								X
Assos and Ainos (Enez)				X								
Athens Agora			0	95								
Berbati-Limnes Survey		X		X			X	1				
Boiotia survey		X	X	X			X	6 fragments				
Butrint Baptistery				15				178				
Butrint Triconch Palace		X		24				180	X			
Çamaltı Burnu Wreck				X			X					

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Splash-Decorated (Islamic)</i>	<i>Fine Sgraffito</i>	<i>Champlevé</i>	<i>Sgraffito Miscell.</i>	<i>Aegean Ware</i>	<i>Measles Ware</i>	<i>Zeuxippus Ware</i>	<i>Italian Maiolica/Proto M</i>	<i>Roulette Ware</i>	<i>Metallic Ware</i>	<i>RMR</i>	<i>PSS</i>
Carrara Santo Stefano, Italy							X					
Chiaravalle, Italy							X					
Constantinople, Agia Irene												X
Constantinople, Great Palace	0	X	0	X	1		0	0				0
Constantinople, Kalenderhane				6			X					
Constantinople, Myrelaion												
Constantinople, Saraçhane		90	0	9	0		83	0				0
Corinth		X	X	840	X	63	X	157	X	X		
Crete				X				X				
Delos Island					1							

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Splash-Decorated (Islamic)</i>	<i>Fine Sgraffito</i>	<i>Champlevé</i>	<i>Sgraffito Miscell.</i>	<i>Aegean Ware</i>	<i>Measles Ware</i>	<i>Zeuxippus Ware</i>	<i>Italian Maiolica/Proto M</i>	<i>Roulette Ware</i>	<i>Metallic Ware</i>	<i>RMR</i>	<i>PSS</i>
Demre (Myra)			X	X								
Edremit				X								
Elis				X			X					
Enkomi, Cyprus				X								
Ephesus			X	X								
Ephesus Artemision							6 (imitation?)					X
Ferrara							X					
Ganos							X					
Gaziköy							X					
Genoa							X					
Genoa, Palazzo Ducale		?		50			X					

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Splash-Decorated (Islamic)</i>	<i>Fine Sgraffito</i>	<i>Champlevé</i>	<i>Sgraffito Miscell.</i>	<i>Aegean Ware</i>	<i>Measles Ware</i>	<i>Zeuxippus Ware</i>	<i>Italian Maiolica/Proto M</i>	<i>Roulette Ware</i>	<i>Metallic Ware</i>	<i>RMR</i>	<i>PSS</i>
Genoa, San Silvestro				12								X?
Gritille				X								X
Gülpınar			X	X								
Hierapolis				X			X ? (1 Zeux?)					
Issos (Kinet)		X	1	X	X		1	X				104
Isthmia, Corinth				X			X	X			X	
Kaman Kalehöyük												
Karacahisar Kalesi, Eskişehir				X								
Kastellorizo				11	69							

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Splash-Decorated (Islamic)</i>	<i>Fine Sgraffito</i>	<i>Champlevé</i>	<i>Sgraffito Miscell.</i>	<i>Aegean Ware</i>	<i>Measles Ware</i>	<i>Zeuxippus Ware</i>	<i>Italian Maiolica/Proto M</i>	<i>Roulette Ware</i>	<i>Metallic Ware</i>	<i>RMR</i>	<i>PSS</i>
Korucutepe, Keban Dam			X (35 percent)	X (60 percent)								
Kouklia, Cyprus		X	X	X	X		X	X				X
Magnesia ad Meandrum							X					
Marseille, France			X		X		X					
Milet												
Nicaea, Roman Theatre			X	X								
Nice, France			X		X		X					
Olynthus			X	X								
Otranto				X		X	X (1 Zeux.?)	223	X			
Paphos				X			X					

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Splash-Decorated (Islamic)</i>	<i>Fine Sgraffito</i>	<i>Champlevé</i>	<i>Sgraffito Miscell.</i>	<i>Aegean Ware</i>	<i>Measles Ware</i>	<i>Zeuxippus Ware</i>	<i>Italian Maiolica/Proto M</i>	<i>Roulette Ware</i>	<i>Metallic Ware</i>	<i>RMR</i>	<i>PSS</i>
Parma							X					
Pavia				X								
Pergamon		X	X	X			X					
Phokis survey				X	33		2	6 ("local maiolica")				
Pisa							X					
Prusa (Bursa)				X								
Rovereto, Italy							X					
Sagalassos			X	X								
Samosata												
Sapes				X								
Sardis				X								X

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Splash-Decorated (Islamic)</i>	<i>Fine Sgraffito</i>	<i>Champlevé</i>	<i>Sgraffito Miscell.</i>	<i>Aegean Ware</i>	<i>Measles Ware</i>	<i>Zeuxippus Ware</i>	<i>Italian Maiolica/Proto M</i>	<i>Roulette Ware</i>	<i>Metallic Ware</i>	<i>RMR</i>	<i>PSS</i>
Serçe Limanı, Bodrum	10		10									
Serres				X			X (developed style; late Zeuxippus)					
Smyrna					X		X					
Sophene (Aşvan Kale)				X								
Sparta			X	X		X	X	X	X			
Taşkun Kale			X (2 percent)	X (58 percent)								
Thassos			36	220			43					4
Thebes					7		17	5				
Thessalonike (Rotunda St. George)		X	X									

Appendix 3. A Gazetteer of Ceramic Finds (Continued)

<i>Site</i>	<i>Splash-Decorated (Islamic)</i>	<i>Fine Sgraffito</i>	<i>Champlevé</i>	<i>Sgraffito Miscell.</i>	<i>Aegean Ware</i>	<i>Measles Ware</i>	<i>Zeuxippus Ware</i>	<i>Italian Maiolica/Proto M</i>	<i>Roulette Ware</i>	<i>Metallic Ware</i>	<i>RMR</i>	<i>PSS</i>
Tille Höyük				X								X?
Troas (Beşik Tepe)		20		39								
Varazze, Italy							X					
Venice and the Laguna		X		X		1	12					
Yumuktepe, Mersin			X	X								X